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ABSTRACT

Primary intended users of this first volume of a two-volume handbook are professional counselors and placement officers involved in expanding the range of jobs available to persons having only basic cognitive skills (e.g., mentally retarded, slow learners, learning disabled). Agencies which would find it useful included employment service offices, schools, rehabilitation agencies, sheltered workshops, private employment agencies, government personnel offices, business, and industry. The handbook broadly summarizes knowledge about jobs (volume 2) and counseling-placement activities (volume 1) relative to the use of basic skills. General and specific reference is made throughout to more detailed techniques and information. Suggestions in this first volume are presented within chapters which correspond to the sequence of activities performed. Chapter 1 suggests ways to assure a full and fair definition of the capabilities of each client. Steps that counselors and placement officers might take to expand the client's job competencies are suggested in chapter 2. Chapter 3 describes how to use existing job availability information to find appropriate jobs for the client group, and chapter 4 deals with creating or developing additional job opportunities. Chapter 5 suggests ways in which information about specific clients and specific job opportunities can be brought together to optimize the client placement. General guidance for the collection and use of data by which managers and administrators can enhance the counseling-placement process are presented in the appendix. (Volume 2, available separately, summarizes requirements information for more than 8,000 relevant occupations selected from the more than 14,000 listings in the "Dictionary of Occupational Titles.") (JT)

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JOB COUNSELING AND PLACEMENT FOR THE USE OF BASIC SKILLS

Volume 1: TECHNIQUES

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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JULY 1977

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PREFACE

National goals in recent years have placed great emphasis on the need to discover and utilize the potential of all of the nation's work force. Federal, state, and local programs for employment of handicapped persons have made their employment a reality. But, until useful tools and techniques are made available for expanding the range of jobs available, the vast majority of these persons will remain unemployed or underemployed--at a loss to the nation of their useful services and at great personal cost to them.

This project was undertaken in response to the need to provide appropriate tools and techniques to expand the range of job opportunities open to persons with limited cognitive skills. The project has been aided by the support of many persons in the Department of Labor and in other Government and private agencies. In particular, the project has been assisted by Louise A. Scott, Manpower Analyst, Office of Research and Development of the Employment and Training Administration who served as project officer, and by the staff of the Division of Testing, the Division of Occupational Analysis, and the Division of Applicant Services of the U. S. Employment Service.

The project also had the benefit of a very able and interested Advisory Panel, consisting of: Bernard Posner, Executive Director, President's Committee for Employment of the Handicapped; Fred J. Krause, Executive Director, President's Committee on Mental Retardation; Mike W. Stumbaugh, Director, National On-the-Job Training Project, National Association for Retarded Citizens; Francis X. Lynch, Director, Division of Developmental Disabilities, Rehabilitation Services Administration, Social and Rehabilitation Service, U. S. Department of Health, Education, and Welfare; George Soloyanis, Executive Director, American Association on Mental Deficiency; Hedwig W. Oswald, Director, Office of Selective Placement, U. S. Civil Service Commission; and Beverly Campbell, Coordinating Director, Joseph P. Kennedy, Jr. Foundation.

Synectics Corporation expresses gratitude to all those persons who contributed to the development of this product, especially to those counselors and placement officers in field locations who graciously assisted in a tryout of the preliminary materials. Their comments and practical experience in use of the preliminary materials have furthered development of a tool which we hope will achieve the objective of the project--to expand the range of job opportunities available to persons having only basic cognitive skills.

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James W. Altman

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INTRODUCTION

INTRODUCTION

OBJECTIVE AND NEEDS

The purpose of this handbook is to expand the range of jobs available to persons having only basic cognitive skills--persons formally diagnosed as being mentally retarded, persons considered to be generally "slow learners" in the educational system, persons with specific learning disabilities, and persons who otherwise have been deprived of an opportunity to develop advanced academic or vocational skills.

Convergent factors are increasing the demand for vocational placement of persons with only basic skills. Special programs seek to train and place persons of limited skill. Programs of deinstitutionalization move individuals into local community life and into the labor market. Court decisions and legislation on the "Right to Education" assure that full community effort will be made to identify and develop potential for employability. All of this is taking place in a social climate of increasing concern for full use of human resources.

Counseling and placement personnel must overcome substantial difficulties in matching this increased concern for use of human resources with effective action. They must cope with traditional barriers to the employment of persons having limited cognitive skills within a context of increasingly sophisticated job requirements and accelerating rates of change in requirements. Despite such difficulties, only full and fair definition of client capabilities and full use of potential for vocational careers are worthy of the counseling and placement professions.

USE AND VALUE

The handbook is intended for use in Employment Service offices, schools, rehabilitation agencies, sheltered workshops, private employment agencies, government personnel offices, business, and industry. The primary intended users are professional counselors and placement officers. The handbook also is intended to assist such professionals in helping community and citizen organizations to locate vocational opportunities for special client groups.

If the handbook is to have effective use, it must function in a limited role within a complex system of information and influence. This information cannot replace counseling and placement skills--it must enhance them. The material cannot reflect local conditions, nor can it maintain close currency with job opportunities. Its value lies in supporting the gathering and analysis of information for both jobs and clients. The

handbook broadly summarizes knowledge about jobs and counseling-placement activities relative to the use of basic skills. General and specific reference is made throughout to more detailed techniques and information.

CONTEXT, CONTENT, AND STRUCTURE

As reflected in Figure 1, the two volumes of the handbook are intended to support counseling and placement activities within a context of expanding the range of jobs available to persons with limited cognitive skills. Also fundamental to this context are rich interaction with employers and clients, a continuous stream of job availability information, and related community support services.

Volume 1 suggests courses of action that are effective in counseling and placing persons of limited cognitive skill. These suggestions are presented within chapters which correspond to the sequence of activities shown in Figure 1. Chapter 1, DETERMINE CLIENT CAPABILITIES, suggests ways to assure a full and fair definition of the capabilities of each client. Steps that counselors and placement officers might take to expand the client's job competencies are suggested in Chapter 2, ENHANCE CLIENT CAPABILITIES THROUGH TRAINING. Chapter 3, IDENTIFY JOB OPPORTUNITIES, describes how to use existing job availability information to find appropriate jobs for the client group. Chapter 4, DEVELOP JOB OPPORTUNITIES, describes how to create job opportunities for the client group. Chapter 5, MATCH CLIENT AND JOB OPPORTUNITIES, suggests ways in which information about specific clients and specific job opportunities can be brought together to optimize the client placement. General guidance for the collection and use of data by which managers and administrators can enhance the counseling/placement process are presented in the Appendix, GUIDANCE TO MANAGERS IN ASSESSING COUNSELING AND PLACEMENT PERFORMANCE.

Volume 2 summarizes requirements information for more than eight thousand occupations selected from the more than fourteen thousand occupational listings in the *Third Edition of the Dictionary of Occupational Titles* (DOT).[1,2] Each of these occupations was judged by analysts at North Carolina State University[3] to require not more than an eighth grade

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[1] United States Department of Labor, Employment and Training Administration (formerly Manpower Administration). Bureau of Employment Security. *Dictionary of occupational titles, definitions of titles.* (Volume I, Third Edition.) Washington, D. C.: U. S. Government Printing Office (GPO#0-520-145), 1965.

[2] United States Department of Labor, Employment and Training Administration (formerly Manpower Administration). Bureau of Employment Security. *Dictionary of occupational titles, occupational classification and industry index.* (Volume II, Third Edition.) Washington, D. C.: U. S. Government Printing Office (GPO#0-690-377), 1965a.

[3] Cunningham, J. W., Slonaker, D. F., Heath, W. D., III, & Hamer, R. M. *Estimated requirements of occupations: Educational development, specific vocational preparation, physical demands, and working conditions.* Raleigh: North Carolina State University, 1974.

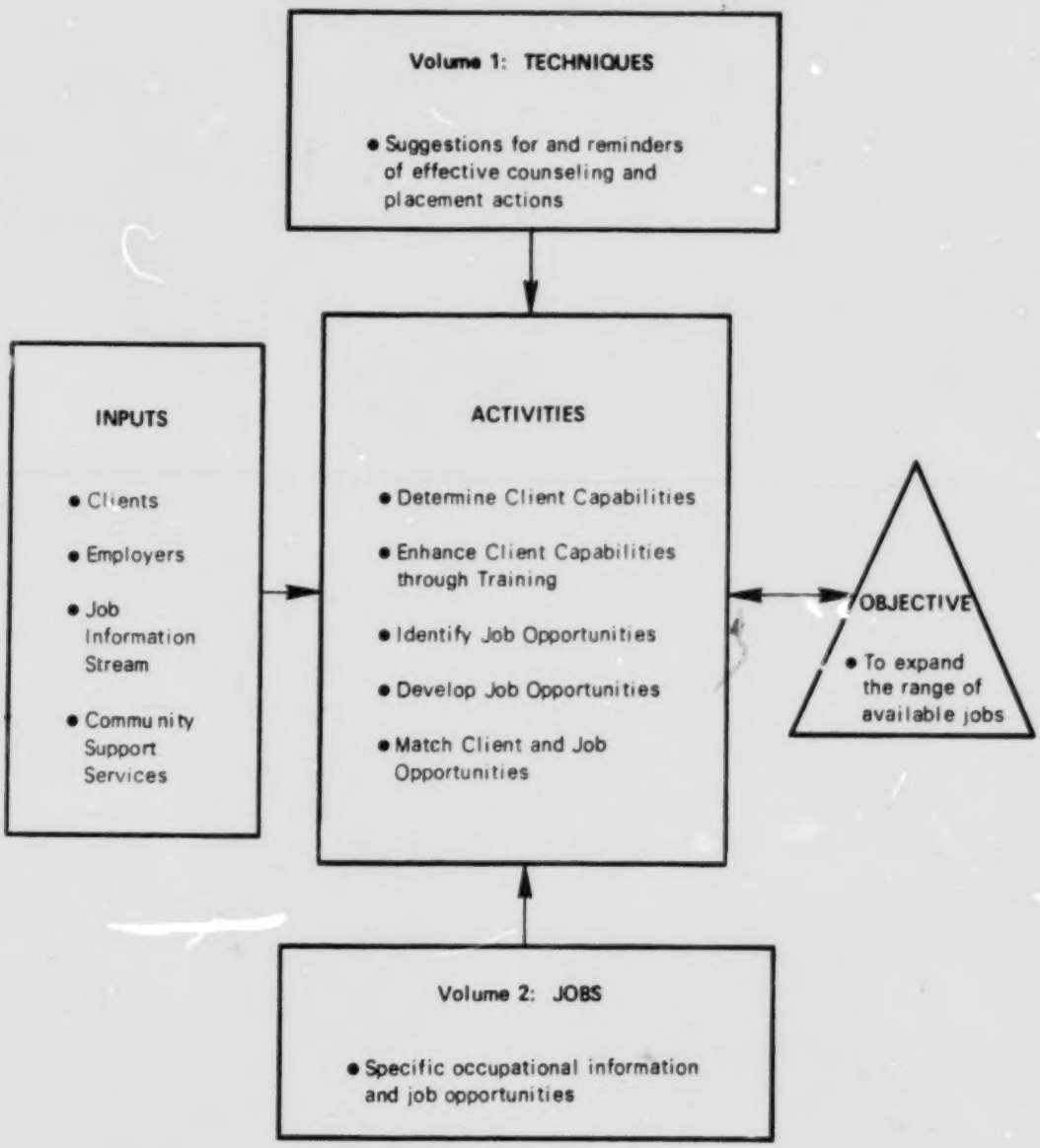
Volume 1: TECHNIQUES
• Suggestions for and reminders of effective counseling and placement actions
INPUTS
• Clients
• Employers
• Job Information Stream
• Community Support Services
ACTIVITIES
• Determine Client Capabilities
• Enhance Client Capabilities through Training
• Identify Job Opportunities
• Develop Job Opportunities
• Match Client and Job Opportunities
OBJECTIVE
• To expand the range of available jobs
Volume 2: JOBS
• Specific occupational information and job opportunities

Figure 1. Perspective of Counseling and Placement Inputs, Activities, and Objectives for Clients with Limited Cognitive Skills

level of educational development--that is, not requiring reasoning development beyond an ability to apply common sense understanding to carry out instructions furnished in written, oral, or diagrammatic form nor beyond an ability to deal with problems involving concrete variables in or from standardized situations. Each of these occupations was also judged by personnel of the Occupational Analysis Branch of the U. S. Department of Labor to require not more than one year of specific vocational preparation.

Occupations are grouped within the major occupational groups of the DOT. Each of these groups is further subdivided by the DOT occupational divisions. Occupational titles are listed according to cognitive skill requirements--independent and combined demands for language, mathematics, and perceptual processing forms of development. (See the Introduction of Volume 2 for fuller explanation of the occupational title listings.)

Chapter 1

DETERMINE CLIENT CAPABILITIES

Chapter 1
DETERMINE CLIENT CAPABILITIES

OVERVIEW

Figure 2 identifies the principal activities in determining client capabilities. Suggestions are presented for carrying out each of these activities. These suggestions are aimed at helping the counselor and placement officer to:

- ✓ Assure a full and fair definition of client capabilities.
- ✓ Identify realistic upper bounds for client job and career performance.
- ✓ Emphasize full use of client capabilities.
- ✓ Obtain information that will guide job placement and specification of training needs.

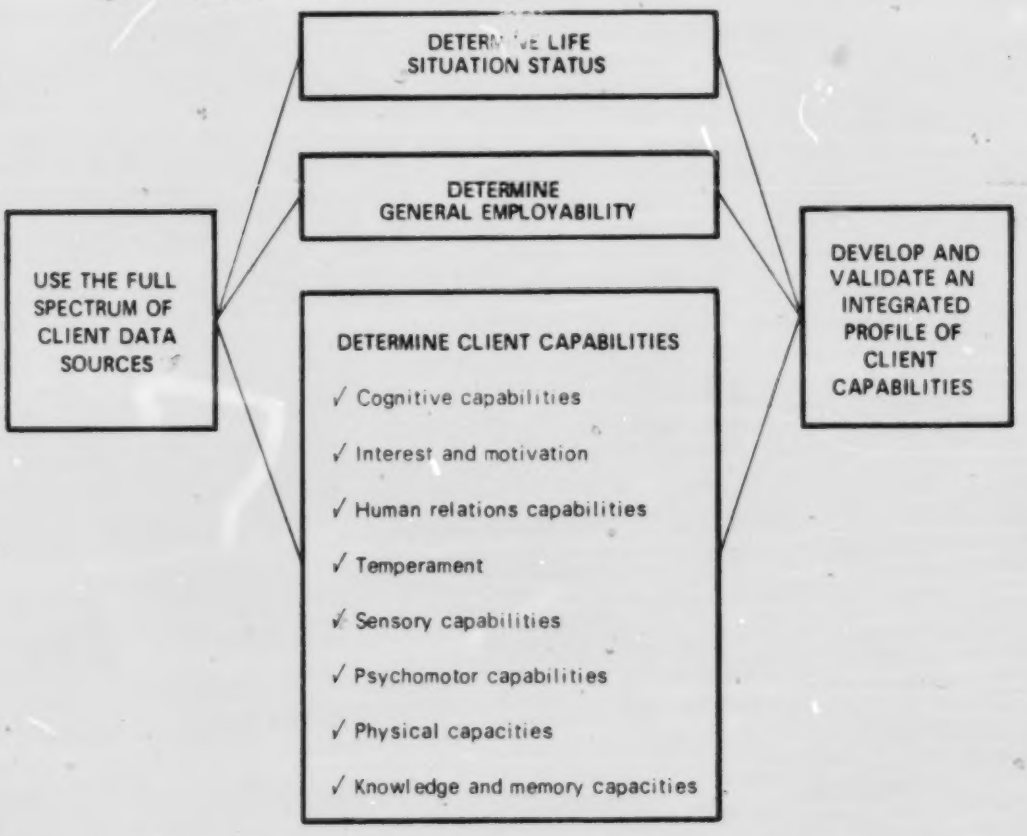
DETERMINE LIFE SITUATION STATUS
DETERMINE GENERAL EMPLOYABILITY
USE THE FULL SPECTRUM OF CLIENT DATA SOURCES
DETERMINE CLIENT CAPABILITIES
✓ Cognitive capabilities
✓ Interest and motivation
✓ Human relations capabilities
✓ Temperament
✓ Sensory capabilities
✓ Psychomotor capabilities
✓ Physical capacities
✓ Knowledge and memory capacities
DEVELOP AND VALIDATE AN INTEGRATED PROFILE OF CLIENT CAPABILITIES

Figure 2. Principal Activities in Determining Client Capabilities

USE THE FULL SPECTRUM OF CLIENT DATA SOURCES

There are two main aspects to using a full spectrum of client data sources. First, there are the sources themselves; second, there are the techniques used to elicit, organize, and evaluate the data.

The many possible specific sources for client data can be grouped into the following classes: directly from the client, from other agencies that have known the individual, from former employers, and through special capabilities measurement activities. Suggestions are presented below for making use of each of these classes of client data sources.

DERIVE INFORMATION FROM THE CLIENT

PREPARE FOR THE CLIENT INTERVIEW

Clients with limited cognitive skills, especially language skills, represent a greater chall liciting capabilities information than do persons with more ad tive skills. Precontact preparation, including familiarity w records, can improve the flow of information to be derived f lient. Fam liarization with documentation about the client prior the interview will permit free interaction during the interview. This approach will reduce the chance that subtle visual cues will be missed during the contact.

DEFINE THE CLIENT/ COUNSELOR ROLES

It is essential that the client understand his or her role in the interview/assessment process. Reflect to the client that the purpose of assessment is to find the best vocational opportunities available where he or she can use demonstrated capabilities. The client needs to understand that he or she is ultimately the source of all assessable information, that the interview is a joint effort of client and counselor, and that success depends upon honest and accurate information about and from the client.

Use of a profile approach, pointing out that all people have differing levels of ability in different areas, is a practical approach. Convey to the client that, for all of us, much of the joy of life is determined by a suitable match between this profile of capability and demands on one's performance.

ENCOURAGE SIMPLE, DIRECT, AND OPEN COMMUNICATION

Use an appropriate vocabulary. Be specific, concrete, and use straightforward examples. Keep factual questions short and answerable in a word or two. It is better to ask many short and simple questions than to place an excessive load on the client with any one question. Clients with limited cognitive skills will tend to have difficulty with unfamiliar words, abstract concepts, and issues involving multiple facets. They are as likely as any group of clients to give honest and accurate information about fact and opinion if they do not feel threatened or confused.

If seeming contradictions arise, pose followup questions that clarify inconsistencies. Review and clarify possible decisions and alternative courses of action. Persons with limited cognitive skills are more likely than most clients to need help in identifying inconsistencies in logic or fact and in identifying or planning courses of action.

ENCOURAGE FREE EXPRESSION OF PERCEPTIONS, FEELINGS, VALUES

Keep the discussion client oriented. Be a good listener. Don't interrupt the client's story or interfere with his or her manner of expression. Inspire confidence by showing consistent interest and acceptance. Avoid expressions of personal sympathy, surprise, shock, embarrassment, ridicule, agreement or disagreement. Accept, recognize, and clarify positive, negative, and mixed feelings. Persons with limited cognitive skills are frequently used to being dominated by more verbal people, and may be all too ready to reflect what they feel is expected of them rather than their true perceptions, feelings, and values.

PROVIDE FOR EXPLORATION, ANALYSIS, AND PLANNING

Keep an open and inquiring mind. Develop and test multiple hypotheses. Avoid premature conclusions. Let the client guide conclusions by reacting favorably or unfavorably to alternative possibilities and plans. Search for and accept new evidence--especially of client capabilities not previously demonstrated or suggested.

USE INFORMATION FROM OTHER AGENCIES THAT HAVE KNOWN THE CLIENT

CONSIDER ALL OF THE AGENCIES THAT MIGHT HAVE INFORMATION

Clients with limited cognitive skills are especially likely to have had prior contact with one or more agencies that may have information about the client's capabilities. Client information might have been recorded in special schools, learning disabilities programs, workshops, vocational training programs, resident programs, and other placement centers.

RECOGNIZE THAT A VARIETY OF INFORMATION CAN CONTRIBUTE TO A PICTURE OF CLIENT CAPABILITY

Behavior exhibited at varied stages of individual development and in different contexts can provide hints about the interests, motives, and abilities of the client. Parents can frequently provide useful insights about attitudes, interest, and capabilities that might otherwise go undetected. Such background information will be especially useful to counselors and placement personnel when it can be fitted into a consistent pattern or profile.

FORMULATE REQUESTS CLEARLY, AND TO ELICIT A DESIRE TO COOPERATE

Most agency personnel will want to respond quickly and completely if they understand that the effort is directed toward helping the client in an important way. They can make the most effective judgments as to what information to provide when the request is specific and its intended use is defined. Make requests personal and specific to the individual client. Avoid routine-sounding requests. Use the most cost-effective combination of letter, telephone, and personal visit to obtain information about the client.

FOLLOW UP ON REQUESTS TO OTHER AGENCIES

Check immediately on the status of promised information that is not forthcoming. Specific supplemental requests can be used to fill holes in a client's profile of capabilities and to clarify seeming inconsistencies in data from a given source or from different sources.

USE EMPLOYER INFORMATION

USE INFORMATION FROM FORMER EMPLOYERS

Obtain information from former employers, including workshop supervisors, to clarify the nature and extent of client capabilities. Even information about characteristics and performance that were negatively evaluated may lead to a clearer understanding of client capabilities. For example, information about the circumstances of discharge for failure to get along with fellow employees may suggest less demanding contexts in which client social skills would be adequate.

USE INFORMATION FROM THOSE WHO HAVE DECLINED EMPLOYMENT TO THE CLIENT

An understanding of why a client was considered, but not accepted, for employment can help to suggest approaches to more successful placement for the client. Usually, employers will be very fair and frank about why one job applicant was selected over another. Specific capabilities they found lacking or developed to an insufficient level can contribute to the client capability profile.

USE INFORMATION FROM POTENTIAL EMPLOYERS

Employers may stipulate capabilities of potential employees in terms of academic performance, performance on psychological tests, and prior job experience. The relationship of these requirements to job performance may not be clear to the counselor or placement officer. Check with potential employers for information about the assumed relationships between such assessment information and job requirements.

USE SPECIAL CAPABILITIES MEASUREMENT DATA

REVIEW AVAILABLE DATA

Determine what information about the client is already at hand or already exists and can be obtained readily from other sources. Use this review in deciding whether additional special measurement is necessary and possible and, if so, what it should include.

SELECT SOURCE FOR SPECIAL CAPABILITIES MEASUREMENT

Where possible, identify alternative sources for client capability measurement. Select the best source or sources to provide the kind of measurement information needed.

SPECIFY PRINCIPAL INTERESTS

Define and communicate to measurement personnel what information will be of greatest benefit in counseling and placing the individual. Measurement personnel will be able to determine the best measure available for the client information sought.

DETERMINE LIFE SITUATION STATUS

The purpose of exploring the life situation of the client is to determine the freedom he or she has in seeking, obtaining, and holding a job. Such a determination can be a useful starting point in seeking specific job opportunities for the individual. It should include a concern for the career implications of at least the following areas:

- ✓ Current living arrangements.
- ✓ Economic status.
- ✓ Physical/medical status.
- ✓ Legal status.
- ✓ General motivation for employment.

DETERMINE CURRENT LIVING ARRANGEMENTS

The client's current living situation may impact on the urgency of obtaining employment, adaptation to a job, and the feasibility of holding a job. For example:

- ✓ A currently institutionalized client may have minimal urgency in locating a position but may require alternative living arrangements to be made before it is feasible to hold a job or make a successful job adaptation.

- ✓ A client currently living in a private family setting, especially a client having dependents, may have maximum pressure to locate a job quickly--but adaptation to employment may be minimally difficult.

- ✓ A client in a transitional living center may have maximum flexibility in the timing of and adaptation to employment, as well as maximum support in achieving success.

- ✓ A client living in a private family setting and being partially dependent upon others may have flexibility, but adaptation to employment may be made difficult by the nature of the dependencies--particularly where family members are overprotective of or have inappropriate aspirations for the client.

DETERMINE ECONOMIC STATUS

The client's economic status may influence the direction and timing of vocational goals. For example, a client without economic resources or alternative income may feel compelled to find immediate employment regardless of longer-range career prospects, whereas a client with interim means of support may be able to undertake special training or other activities aimed at more distant goals.

DETERMINE PHYSICAL MEDICAL STATUS

Awareness of physical or health status is necessary to help steer any client away from inappropriate occupations. But a more important purpose for determining the client's physical or medical status is to identify the residual capabilities having potential for job performance. In particular, attention should be given to the compensations clients make to physical limitations which can have job utility. For example, blind persons sometimes show exceptional attention to auditory and tactual information. Lame persons may develop exceptional ability to perform fine finger manipulations for extended periods of time.

DETERMINE LEGAL STATUS

The latitude available to client and counselor in exploiting job opportunities may be affected by the client's legal status. If the client is a free agent, employment may be simply a matter of mutual agreement between employer and client--facilitated by the efforts of counselor and placement officer. Third-party approval may be required for clients with legal guardians. Further restrictions may have to be considered for clients who are wards of the state.

DETERMINE MOTIVATION FOR EMPLOYMENT

The counselor and placement officer's role may be extensively influenced by the nature and extent of the client's motivation for employment. Clients with high motivation may require only a minimum of information about job placement and leads to opportunities. In contrast, a client with fears and mixed motives concerning employment may require encouragement and support at each step of the employment process. A client with narrow interests and stringent requirements may have to be guided toward more realistic expectations and supported in the employment process despite limitations on the spectrum of opportunities to be considered.

DETERMINE GENERAL EMPLOYABILITY

The purpose of determining the general employability of the client is to augment the information about the client's freedom to seek, obtain, and hold a job--the information gained from exploring the life situation parameters. This general assessment of employability can serve as a useful frame of reference in guiding the more detailed determination of specific capabilities which follows. Determination of general employability should include a concern for the career implications of at least the following areas:

- ✓ Ability to make independent career choices.
- ✓ Ability to live independently.
- ✓ Local mobility.
- ✓ Freedom to relocate.
- ✓ Ability to go through the employment process independently.

DETERMINE ABILITY TO MAKE INDEPENDENT CAREER CHOICES

The client's ability to make independent career choices may impact on the nature of responsibility the counselor and placement officer must assume in guiding the client. It also may influence the nature and extent of consultation which is appropriate to have with others who are important in the life situation of the client.

All of the life situation parameters can provide clues about the client's ability to make independent career choices, particularly information about current living arrangements and legal status. In addition, the counselor and placement officer may be able to gain useful information about capability for independent career choice from one or more of the following:

- ✓ Assessments from educational, medical, or other agencies which touch upon the client's decision making or judgmental abilities.
- ✓ The history of the client, particularly as it reveals evidence of success in making past independent judgments.
- ✓ Evidence of client comprehension of the concept of career choice, as revealed in the course of interview and discussion.

DETERMINE ABILITY TO LIVE INDEPENDENTLY

Counselors and placement personnel who work with clients having severe cognitive limitations frequently find that adjustment to a well-selected job situation is less difficult than adjustment to independent living. Regardless of the relative difficulty of adjustment to job versus independent living, the combined adjustments can place an excessive burden on the client. The effective counselor and placement officer will consider this potential combined impact and will phase changes to achieve maximum probability of successful adjustment.

Generally, the best starting point for determination of the client's ability to live independently is with the life situation parameters outlined above--with particular emphasis on evidence from the current status or history of the client which clarifies conditions under which satisfactory adjustments can be made to productive life situations. Such status and history information about life situations must be projected against future possibilities. These projections should consider the capability to:

- ✓ Maintain personal hygiene and health; obtain suitable health services.
- ✓ Obtain and prepare proper food; maintain proper nutrition.
- ✓ Obtain, wear, and maintain appropriate clothing.
- ✓ Obtain appropriate housing and care for the home.

✓ Manage personal finances.

✓ Obey laws; resist victimization.

✓ Participate successfully in needed social interactions.

These capabilities should be reviewed in the light of transitional and permanent community support available to the client.

DETERMINE LOCAL MOBILITY

The client's radius of job opportunities will be importantly determined by his or her access to transportation. Full consideration must be given to transportation factors in setting the geographic scope of job opportunities sought. Transportation availability may range from use of public transportation all the way to private vehicle operation or even car pooling. Access to transportation is not the only consideration, however. Costs of transportation may severely limit the range of job opportunities which can be considered. When clients are unskilled in independent mobility, effort should be given to a determination of the extent and methods by which they can become independently mobile.

DETERMINE FREEDOM TO RELOCATE

Even with the fullest identification of capabilities and job opportunities, clients with only basic cognitive capabilities may be more restricted to jobs in a given geographic area than individuals with more extensive capabilities. It is of special importance that the client's freedom to relocate, or alternatively, limitations on that freedom be investigated. The lack of freedom to locate may severely curtail the types and locations of job opportunities than can be considered for a given client.

DETERMINE ABILITY TO GO THROUGH THE EMPLOYMENT PROCESS

Clients with only basic cognitive capabilities frequently have employable skills, though they may have grave difficulty with preemployment competition and even with the mechanics of the employment process. For example, a job may require only manual skills but the employment process may demand completion of an employment blank. Consequently, it is important that the counselor and placement officer be able to distinguish between job-getting and job-holding skills of the client. Such distinctions will help to define the range of employment opportunities, to clarify the kinds of information that should be provided to potential employers, and to establish what kind of direct assistance should be provided to the client in the employment process.

DETERMINE COGNITIVE CAPABILITIES

Assessment of cognitive parameters is concerned with determination of the ability to perceive, to know, and to understand. Human cognitive skills cover an enormous variety and involve processes for which there is not yet rigorous scientific understanding. For vocational guidance purposes, assessment of three cognitive parameters is of special importance:

- ✓ Language Development - the ability to comprehend and express written or spoken language.
- ✓ Mathematics Development - the ability to comprehend and apply numerical concepts and symbols.
- ✓ Perceptual Processing Development - the ability to detect sensory inputs and to manipulate the derived information.

These parameters are of such importance that they have been used as part of the basic structure for organizing the job listings presented in Volume 2.

DETERMINE LANGUAGE CAPABILITY

Language development capability levels employed here are those used in the *Dictionary of Occupational Titles* (DOT). These are identified as the Language Component of the *General Educational Development* (GED) scale.[4] Within the DOT, seven levels of language capability are identified (labeled as levels 0 through 6). For persons of limited cognitive capability, only the lower four levels of the scale are considered appropriate (levels 0 through 3).

Determination of the client's language capability should distinguish among three broad levels of language competency:[5]

- ✓ Minimal - GED level 0 or 1 (up through Grade 3). Not more than reading, speaking, and printing simple sentences containing subject, verb, and object using present and past tenses.
- ✓ Moderate - GED level 2 or 3 (Grades 4 through 8). Not more than selective reading of textbooks and other materials to extract an essential theme or idea, composing reports with proper grammar and spelling, using proper format, and preparing neat papers.
- ✓ High - GED levels 4 through 6 (Grades 9 and above). Involves more than basic language skills. A client who can demonstrate achievement at this level should not be substantially limited by language capabilities except for highly specific job requirements.

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4 General Educational Development (GED) should not be confused with the General Equivalent Diploma (GED) awarded on the basis of test and indicating the equivalent of a high school education.

5 See *Relating General Education Development to Career Planning* (U. S. Department of Labor, 1971) for more information about levels of language development, language curricula, and career implications.

Four techniques are especially useful in determining the client's language capability:

- ✓ School achievement records are likely to indicate rather directly the level of language capability achieved by the client.

- ✓ Observation of the client during interviews by the counselor and placement officer can determine approximate vocabulary levels, grammatical usage, comprehension of verbal communications, and ability to communicate verbally.

- ✓ Tests calibrated by grade level such as the *Stanford Achievement Test* (SAT) which includes Paragraph Meaning, Word Meaning, Spelling, and Language subtests. The U. S. Employment Service *Basic Occupational Literacy Test* (BOLT) contains Reading Vocabulary (RV) and Reading Comprehension (RC) subtests which are calibrated to educational development grade levels by equation to SAT norms.

- ✓ Language aptitude tests such as the U. S. Employment Service Verbal Aptitude of the *General Aptitude Test Battery* (GATB) and the *Nonreading Aptitude Test Battery* (NATB) can assess the functional vocabulary of clients. For purposes of making rough estimates of educational development, percentile scores from these tests can be used with grade norms for the SAT, BOLT, or other grade-calibrated test known to correlate highly with the language aptitude tests.

The client's determined level of language capability has great utility to the counselor or placement officer in the use of Volume 2 for identifying appropriate jobs for the client. Clients who are rated as having only minimal language competency (GED level 0 or 1) will be able to handle jobs identified as having only minimum language demands, whereas jobs with moderate language demands should not be considered for these clients. Clients who are rated as having moderate language capabilities (GED level 2 or 3) will be able to handle jobs having moderate language demands, as well as those having only minimum language demands.

DETERMINE MATHEMATICS CAPABILITY

Mathematics development capability levels employed here are those used in the DOT. These are identified as the Mathematics Component of the GED scale. Within the DOT, seven levels of mathematics capability are identified (labeled as levels 0 through 6). For persons of limited cognitive capability, only the lower four levels of the scale are considered appropriate (levels 0 through 3).

Determination of the client's mathematics capability should distinguish among three broad levels of mathematics competency:[6]

- ✓ Minimal - GED level 0 or 1 (up through Grade 3). Not more than counting, addition and subtraction of two-place numbers, and familiarity with standard units of measurement and with basic measuring equipment such as clocks, rulers, and scales.

- ✓ Moderate - GED level 2 or 3 (Grades 4 through 8). Not more than computing discounts, interest, percentage, surface areas, values, and weights and measures, using four basic arithmetic operations.

- ✓ High - GED level 4 through 6 (Grades 9 and above). Involves more than basic mathematical skills. A client who can demonstrate achievement at this level should not be substantially limited by mathematics capabilities except for highly specific job requirements.

Four techniques are especially useful in determining the client's mathematics capability:

- ✓ School achievement records are likely to indicate rather directly the level of mathematics capability achieved by the client.

- ✓ Observation of the client during interviews by the counselor and placement officer can yield information about mathematical problem solving ability if basic concepts and exercises are introduced.

- ✓ Tests calibrated by grade level such as the SAT which includes Arithmetic Reasoning and Arithmetic Computation subtests. The U. S. Employment Service BOLT also contains Arithmetic Reasoning (AR) and Arithmetic Computation (AC) subtests which are calibrated to educational development grade levels by equation to SAT norms.

- ✓ Mathematical Aptitude tests such as the U. S. Employment Service Numerical Aptitude of the GATB and NATB can assess the client's ability to perform arithmetic operations quickly and accurately. For purposes of making rough estimates of educational development, percentile scores from these tests can be used with grade norms for the SAT, BOLT, or other grade-calibrated tests known to correlate highly with the mathematical aptitude tests.

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6 See *Relating General Education Development to Career Planning* (U. S. Department of Labor, 1971) for more information about levels of mathematics development, mathematics curricula, and career implications.

As with the client's language capability, the client's determined level of mathematics capability has great utility for the use of Volume 2 in identifying appropriate jobs for the client. Clients who are rated as having only minimal mathematics competency (GED level 0 or 1) will be able to handle jobs identified as having only minimum mathematics demands. Jobs with moderate mathematics demands should not be considered for these clients. Clients who are rated as having moderate mathematics capabilities (GED level 2 or 3) will be able to handle jobs having moderate mathematics demands, as well as those having only minimum mathematics demands.

DETERMINE PERCEPTUAL PROCESSING CAPABILITY

Perceptual processing involves the detection of sensory patterns from any sense mode or combination of sense modes--sight, audition, touch/kinesthesis, taste, or smell--and making a comparison to or a discrimination from a like input or mental image. In effect, perceptual processing is that cognitive activity we frequently perform in order to make a judgment about a sensory input and which leads to formulation of an appropriate response to that input.

Most jobs have a requirement for some significant form of perceptual capability, but only a minority combine this requirement with the additional significant requirement for comparison or discrimination. Simple job-relevant examples of perceptual processing are activities such as:

- ✓ Visually inspecting and/or stirring a compound and making the judgment that the compound has or has not achieved the right consistency, based on some prior knowledge of what that consistency ought to be. (Cement mixing, for example.)
- ✓ Sharpening a cutting tool--such as a chisel or scissors--according to visual estimates of the angle required so that the resulting edge is neither too acute nor too obtuse.
- ✓ Locating an interior wall stud by distinguishing changes in loudness and pitch as one taps toward or away from the stud's position.

Determination of the client's perceptual processing capability should distinguish between two broad levels of competency:

- ✓ Minimal - the ability to detect sensory information is present through a variety of sense modes, but the ability to manipulate this information to make comparisons or discriminations about those sensory inputs is not present to any significant extent.
- ✓ Moderate - the ability to detect sensory information is present through a variety of sense modes; the ability to manipulate this information to make comparisons or discriminations about these sensory inputs is also present to a significant extent.

While perceptual processing is an everyday activity, the counselor or placement officer is faced with two special problems in determining these capabilities of the client:

- ✓ Norms of development in this area are not well established.
- ✓ Standardized measures for sense modes other than sight are not widely available.

However, useful information about perceptual processing can be gained from consideration of scores on some standardized tests, for example:

- ✓ A perceptual test such as the GATB or NATB Form Perception (P) and/or Clerical Perception (Q).
- ✓ A spatial relations test such as the GATB or NATB Spatial Aptitude (S).
- ✓ Various other aptitude tests or achievement tests.

In the absence of the above test information, counselors and placement officers may be able to gain useful information for determining the client's perceptual processing capability from:

- ✓ Records of school and job performance.
- ✓ Interview responses to questions about experience with perceptual processing tasks.
- ✓ Observation of the client in training and/or workshop environments.
- ✓ Information about hobbies, crafts, or previous work experience.

The client's determined level of perceptual processing capability is a third key element of information in the use of Volume 2 for identifying appropriate jobs for the client. Clients who are rated as having only minimal perceptual processing capability will be able to handle jobs identified as having only minimum perceptual processing demands. Jobs with moderate perceptual processing requirements should not be considered for these clients. Clients who are rated as having moderate perceptual processing capabilities will be able to handle jobs having moderate perceptual processing demands, as well as those jobs having only minimum perceptual processing demands.

DETERMINE REASONING CAPABILITY

One further parameter of cognitive capabilities may have utility to counselors and placement officers in assessing the client's cognitive capability and in relating that capability to job requirements. This is the parameter of reasoning development, part of the GED scale employed in

the DOT. In the DOT usage, reasoning development deals primarily with an ability to follow instructions or to apply logical rules to situations encountered on the job.

Within the DOT, seven levels of reasoning development are identified (labeled as levels 0 through 6). For persons of limited cognitive capability, only the lower four levels of the scale are considered appropriate (levels 0 through 3). Determination of the client's reasoning capability should distinguish among three broad levels of reasoning competency:

- ✓ Minimal - GED level 0 or 1. Not more than the ability to apply commonsense understanding to carry out simple one- or two-step instructions and to deal with standardized situations.

- ✓ Moderate - GED level 2 or 3. Not more than the ability to apply commonsense understanding to carry out instructions furnished in written, oral, or diagrammatic form and to deal with several concrete variables in standardized situations.

- ✓ High - GED levels 4 through 6. The ability to apply principles of rational systems or of logical or scientific thinking to a range of intellectual and practical problems and to deal with a variety of abstract and concrete variables. A client who can demonstrate reasoning ability at this level should not be substantially limited by reasoning capabilities except for highly specific job requirements.

Three techniques may be useful in determining the client's reasoning capability:

- ✓ School achievement records are likely to indicate rather directly the level of reasoning capability achieved by the client.

- ✓ Observation of the client during interviews can determine the level of ability to apply rules and to follow instructions.

- ✓ Extrapolation from language and mathematics capability levels. Reasoning development can be assumed to be at least equal to the highest level achieved for language or mathematics capability.[7]

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[7] This strategy was applied by the analysts at the North Caroline State University in their determination of the reasoning requirements for each of the DOT occupational titles.

DETERMINE INTEREST, ATTITUDE, AND MOTIVATION

RECOGNIZE DIFFERENT ASPECTS OF JOB AFFECT

Three different aspects are important in determining the feelings (affect) clients have toward any given attribute, characteristic or parameter of a job:

- ✓ Interest is the degree of importance a client places in a particular parameter. For example, a client may feel that the most important feature of a job is knowing exactly what the standards are for successful performance.

- ✓ Attitude is the direction and strength of feeling a client has toward a particular job characteristic. Attitudes can be independent of interests. For example, a client may feel wholeheartedly favorable toward contact with other people on the job but place little importance in this feature to the point of being quite satisfied with an isolated work position.

- ✓ Motivation is the client's tendency to take action in accordance with interests and attitudes, although it may be independent of both. For example, a client may feel that working for people for their social welfare is important and a highly positive feature of a job yet take no steps toward obtaining a job where this is possible.

DETERMINE INDIVIDUAL ACTIVITY PREFERENCES

Volume II of the DOT provides analyses which organize groups of jobs having the same basic occupational, industrial, and worker characteristics into worker trait groups. These groupings help the user to discern relationships among occupations and also provide a method for classifying worker abilities and experiences. One such set of parameters is associated with worker preferences for different types of activities.

It is common, as in the DOT, to contrast preferences for certain types of activities or experiences with rejection of contrary types of activities or experiences. Such contrasts do not always accurately reflect a client's feelings. For example, even though most individuals having a strong preference for activities dealing with machines may not care for activities involving human interaction, a particular client may have strong and equally positive feelings toward both.

Activity preference parameters identified in the summary profiles of the DOT (Volume II)[8] worker trait groups are as follows:

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[8] Worker abilities, personal traits, and characteristics associated with successful job performance are applied to job groups in Volume II of the DOT. Some of these worker traits are employed in the remainder of this chapter for the description of client abilities. A full explanation of the worker traits as they are employed to describe jobs is presented in Appendix B of Volume II of the DOT.

Preferences for Activities Involving:	Often Contrary to:
(1) Things and objects	(6)
(2) Business contact with people	(7)
(3) A routine, concrete, organized nature	(8)
(4) Social welfare, dealing with people and language in social situations	(9)
(5) Prestige or the esteem of others as a result	(0)
(6) People and the communication of ideas	(1)
(7) Science and technology	(2)
(8) An abstract and creative nature	(3)
(9) Nonsocial interaction with processes, machines and techniques	(4)
(0) Tangible, productive satisfactions and results	(5)

For this client population, worker trait groups associated with the selected sample of jobs exclude the following activity preference parameters from consideration: (5) Prestige or the esteem of others, (7) Science and technology, and (8) Abstract and creative thinking.

Results on interest inventories and attitude measures, reported school and job performance, discussions with the client, and interview observations can all help in assessing affective parameters.

DETERMINE HUMAN RELATIONS CAPABILITIES

Human relations capabilities may significantly influence the client's job suitability and type of job preference. Human relations capability is primarily concerned with aspects of human interaction and relations frequently encountered in jobs--aspects of job performance which relate to the specific social requirements of the work situation. It is distinguished from the capabilities previously discussed under "life situation" and "general employability" in that it relates to on-the-job sociability requirements--interactions with fellow workers, supervisors, subordinates, and clients. It involves ethical, legal, and human relations criteria that govern behavior in both routine and nonroutine situations. Style, grooming, etiquette, and job conventions are included.

Three subareas can be identified:

- ✓ Sales or persuasion - facilitating persuasive interactions (e.g., with clients or customers) within established limits of propriety.
- ✓ Service- interaction which is oriented toward recognition of and responsiveness to client/customer needs or objectives.
- ✓ Communications - sensitivity and responsiveness to the receptivity and motivation of others.

Several sources of information will usually be available to the counselor or placement officer for making a determination of the type and extent of the client's human relations capability:

✓ Previous work experience.

✓ Expressions or indications of client interests.

✓ Observation and discussion during the interview.

✓ Information from teachers, workshop supervisors, previous employers, etc.

DETERMINE CLIENT TEMPERAMENTS

The DOT worker traits data identify twelve types of occupational situations and seven main kinds of working conditions or physical surroundings to which a worker may have to adjust. The counselor and placement officer may be able to obtain information from teachers, former supervisors, school and work records, and self-reports of clients concerning capabilities to adjust to these situations and conditions.

DETERMINE SITUATIONAL TEMPERAMENTS

These temperaments involve capabilities to adjust to situations involving:

Situational Temperament Code	
(1)	A variety of duties often characterized by frequent change.
(2)	Repetitive or short cycle operations carried out according to set procedures or sequences.
(3)	Doing things only under specific instructions, allowing little or no room for independent action or judgment in working out job problems.
(4)	Direction, control, and planning of an entire activity or the activities of others.
(5)	Dealing with people in actual job duties beyond giving and receiving instructions.
(6)	Working alone and apart in physical isolation from others, although the activity may be integrated with that of others.

(7) Influencing people in their opinions, attitudes, or judgments about ideas or things.

(8) Performing adequately under stress when confronted with the critical or unexpected.

(9) Generalization, judgment, or decision-making against sensory or judgmental criteria.

(0) Generalization, judgment, or decision-making against measurable or verifiable criteria.

(X) Interpretation of feelings, ideas, or facts in terms of personal viewpoint.

(Y) Precise attainment of set limits, tolerances, or standards.

Based on the situational temperaments associated with the jobs selected for inclusion in Volume 2 of the handbook, the following types of situational temperaments are not of significance for the client group: (4) Direction, control, and planning of an entire activity or the activity of others; (6) Working alone and apart in physical isolation from others, although the activity may be integrated with that of others; (7) Influencing people in their opinions, attitudes, or judgments about ideas or things; and (X) Interpretation of feelings, ideas, or facts in terms of personal viewpoint.

DETERMINE TEMPERAMENTS RELATING TO WORKING CONDITIONS

These temperaments involve capacities to adjust to physical surroundings or conditions involving:

Working Condition Code

(1-I) Inside work.

(1-O) Outside work.

(1-B) Both inside and outside work.

(2) Extremes of cold plus temperature changes.

(3) Extremes of heat plus temperature changes.

(4) Wetness and humidity.

(5) Noise and vibration.

(6) Hazards.

(7) Fumes, odors, toxic conditions, dust, and poor ventilation.

DETERMINE SENSORY CAPABILITIES

Perceptual processing, one of the cognitive capabilities previously discussed, assumes that the client has capabilities to sense the information which is to be perceived and manipulated. The counselor and placement officer may, however, wish to determine the client's level of these sensory capabilities--or at least verify that the client has no major sensory defects. Medical examinations will usually be the best source of information.

DETERMINE SIGHT CAPABILITIES

Sight or visual sensory capabilities include:

✓ Visual acuity for objects both near and far.

✓ Depth perception and distance judgment.

✓ Field of vision.

✓ Accommodation--achieving and maintaining sharp focus.

✓ Color perception.

✓ Adjustment to light/dark changes.

DETERMINE AUDITION CAPABILITIES

Audition refers to the ability to hear across the normal auditory frequency spectrum, especially in the voice range. The ability to speak audibly could also be included as part of the client's auditory capability.

DETERMINE TOUCH/ KINESTHESIS CAPABILITIES

The ability to perceive attributes of objects and materials by means of receptors in the skin, particularly those of the fingertips, is a rather frequent characteristic of jobs. Attributes of touch/kinesthesis which the counselor or placement officer might address in determining the client's touch/kinesthesis sensitivities include size, shape, temperature, and texture.

DETERMINE TASTE AND SMELL CAPABILITIES

Requirements for taste and smell capabilities are restricted to a relatively small proportion of jobs. The counselor and placement officer may, therefore, want to explore these areas only in response to demands of specific job opportunities.

DETERMINE PSYCHOMOTOR CAPABILITIES

Psychomotor or "perceptual-motor" abilities tend to have only slight positive correlation with measures of cognitive abilities. Counselors and placement officers should, therefore, encounter a full distribution of psychomotor capabilities among clients with only basic cognitive skills. Thus, psychomotor capabilities represent a considerable reservoir of vocational resources among clients with cognitive limitations.

Counselors and placement officers are likely to find it useful to determine the client's psychomotor capabilities in the following four dimensions:

- ✓ Basic motor coordination.
- ✓ Dexterity.
- ✓ Control operation.
- ✓ Reaction speed and steadiness.

DETERMINE BASIC MOTOR COORDINATION CAPABILITY

The ability to move hands or fingers rapidly and accurately in response to visual signals is fundamental to many job tasks--as in machine-tending. Information can be obtained from work and school records, the Motor Coordination (K) measure of the GATB and NATB, and special job sample or apparatus tests.

DETERMINE DEXTERITY CAPABILITY

Finger and/or hand dexterity are frequently required in conjunction with basic motor coordination as well as being required independently of any significant motor coordination requirements. Information can be gained from the GATB and NATB as follows:

- ✓ Finger dexterity is the ability to move the fingers and to rapidly and accurately manipulate small objects. The GATB/NATB test battery provides measures of Finger Dexterity (F) based on separate measures of object assembly and disassembly.
- ✓ Manual dexterity is the ability to move the hands easily and skillfully. The GATB/NATB test battery provides measures of Manual Dexterity (M) based on separate measures of ability to work with the hands in placing and turning objects.

Information on dexterity can also be obtained from work and school records, job sample tests, and other apparatus tests.

DETERMINE REFINED CONTROL OPERATION CAPABILITY

There are four principal kinds of refined control operating capabilities which can be examined:

- ✓ Precision control involves using the larger muscles of the arm-hand or leg-foot, especially where speed is important.

- ✓ Multilimb coordination usually involves multiple controls. This can require the use of two hands, two feet, or a combination of hands and feet. Some of the requirements for this type of refined control operation are called out in Volume II of the DOT worker-trait groups as a requirement for Eye-Hand-Foot Coordination (E).

- ✓ Rate control involves the making of continuous anticipatory motor adjustments to changes in speed and/or direction of a continuously moving target--as in pursuit of a fleeing animal.

- ✓ Response orientation involves selection of the proper movement in reaction to suddenly appearing sensory patterns--as in avoiding a child who runs into the street in front of an automobile.

With the exception of vehicular operation, refined control operations are not as frequently required in job performance as are basic motor coordination and finger and manual dexterity. Nor are measures of this aspect of psychomotor capability so readily available--again, except for information which may derive from driver training and driver proficiency measurement.

In general, counselors and placement officers will need to depend upon information from special vocational training programs, job sample tests, performance on simulators, and special apparatus tests to determine the client's refined control operations capability. Clients themselves and teachers, former employers, and workshop supervisors, for example, may be able to provide useful information by describing the control operating tasks which the client has successfully performed.

DETERMINE REACTION SPEED AND STEADINESS CAPABILITIES

There are two additional types of specialized psychomotor capabilities information which the counselor and placement officer can consider if available from records, reports, observation, or self-report by the client:

- ✓ Reaction speed involves a fast and nearly automatic reaction to a stimulus--such as cutting power when a danger signal flashes. One important condition of reaction speed is the absence of a significant requirement for selection of alternative response actions.

- ✓ Arm-hand steadiness as is required in the assembly of delicate components and in the absence of a significant requirement for strength.

DETERMINE PHYSICAL CAPACITIES

Counselors and placement officers may obtain information about a client's physical capacities from school records on physical fitness, job performance records, medical reports, work performance samples, the performance of a few simple physical exercises in the interview situation, and self-reports of physical achievement by the client. Four areas featured in the worker traits data in the DOT may be of particular concern:

- ✓ Strength and stamina.
- ✓ Climbing and balancing.
- ✓ Stooping, kneeling, crouching, and crawling.
- ✓ Reaching, handling, and fingering.

DETERMINE STRENGTH AND STAMINA

This area is concerned with the following aspects of lifting, carrying, pushing and pulling capacity:

- ✓ Ability to make rapid and repeated movements.
- ✓ The maximum force that can be exerted against external objects over short periods.
- ✓ Ability to sustain force or action over time, including both muscular and cardiovascular endurance.

DETERMINE CLIMBING AND BALANCING CAPACITIES

This area is concerned with capabilities for:

- ✓ Ascending or descending ladders, stairs, scaffolding ramps, poles and ropes.
- ✓ Maintaining balance in walking, standing, crouching, running, or performing gymnastic feats.

DETERMINE CAPACITIES FOR STOOPING, KNEELING, CROUCHING, AND CRAWLING

All of these activities demand ability to coordinate the simultaneous actions of different parts of the body while making gross body movements. Usually, these activities also involve at least a modest requirement for maintaining balance.

DETERMINE CAPACITIES FOR REACHING, HANDLING, AND FINGERING

This area includes three physical demands:

- ✓ Reaching - extending the hands, arms, and trunk in any direction.
- ✓ Handling - seizing, holding, grasping, and turning primarily by wrist or arm action.
- ✓ Fingering - picking, pinching, or working on objects primarily by finger action.

Feeling--perceiving attributes by means of receptors in the skin--is grouped with the capacities for reaching, handling, and fingering in the physical demands characteristics of the DOT worker trait group data. However, in this chapter, feeling has already been considered as one of the sensory capabilities.

DETERMINE KNOWLEDGE AND MEMORY CAPABILITIES

Clients with only basic cognitive skills may have combinations of technical capabilities and experiences which result in retention of concepts and principles that are job relevant. The counselor and placement officer may be able to identify such areas of working knowledge through work and school records, achievement test results, interviews, previous work experience, and hobbies.

Job-relevant knowledge, even at an entry level, is enormously varied. It may help, however, to organize the identification of knowledge capabilities around the following four areas:

- ✓ Mechanical-structural.
- ✓ Electrical.
- ✓ Chemical.
- ✓ Biological.

IDENTIFY MECHANICAL-STRUCTURAL KNOWLEDGE CAPABILITIES

This area deals with the design, operation, and maintenance of structures and machines, both stationary and vehicular. It includes knowledge concerning common types of tools, connectors, and fittings and their appropriate uses. Principles of safety relating to mechanical devices and construction are involved.

Mechanical-structural knowledge may be required to perform such tasks as assembly/disassembly or adjustment of equipment; verifying proper operation of equipment; troubleshooting to diagnose malfunctions in equipment; and applying concepts of mechanical advantage, leverage, and conversion of forces to solve a variety of practical work-related problems. Clients with moderate mechanical-structural capabilities will demonstrate knowledge and ability to a level to handle job activities such as: adjusting, assembling, drilling, fabricating, grinding, inspecting, installing, operating equipment, repairing, and testing.

IDENTIFY ELECTRICAL KNOWLEDGE CAPABILITIES

This area encompasses knowledge concerning concepts and principles of electro-mechanics, electricity, and electronics. It involves concepts of electrical safety--including static electricity, electricity and combustion, shock, capacitance, and insulation.

Examples of situations involving electrical knowledge include the proper grounding of hand tools to prevent static electricity discharges in an explosive or combustible environment, discharging high voltage from a TV picture tube prior to removal from a set, converting the current consumption of an appliance from watts to amperes at a given voltage, and applying signal tracing and circuit continuity procedures to isolate malfunctions in electrical equipment or wiring systems. In some instances, operation of electric-powered equipment will require the client to have moderate electrical knowledge capabilities.

IDENTIFY CHEMICAL KNOWLEDGE CAPABILITIES

This area includes knowledge of common materials, reactants, and reactions--especially familiar reactions being combustion and cleaning. It also includes chemical processes and safety factors relating to chemicals.

Chemical knowledge may be required in the performance of such tasks as: handling acids, caustic solutions, and toxic or explosive gases; carrying out titration and similar tests for pH; and translating chemical notations to generic terms (e.g., CO_2/carbon dioxide, C_2H_2/acetylene).

IDENTIFY BIOLOGICAL KNOWLEDGE CAPABILITIES

This area is concerned with biological and health systems. It includes concepts and principles in human, animal, and plant care. Medicine, hygiene, nutrition, sanitation, pollution, and ecology are all relevant.

Biological knowledge may be required to perform jobs in the areas of farming and animal production and in pharmaceutical and therapeutical occupations. Knowledge of health criteria and tests are important as is knowledge of biological reactions to common materials, processes, and chemicals. Knowledge of species and their distinctive characteristics, life cycles, and sexual factors may also be involved.

DEVELOP AND VALIDATE AN INTEGRATED PROFILE OF CLIENT CAPABILITIES

DEVELOP SUMMARY CLIENT PROFILE

Counselors and placement officers may find it useful to consolidate client information on a summary capability profile. This can be done in any format convenient to the counselor or placement officer. A sample Client Capabilities Summary form, which deals with all of the client characteristics discussed in the chapter, is shown in Figure 3. It may not always be possible for counselors and placement officers to assess a client on each of the suggested parameters. But, the more complete the client assessment, the greater the potential for an optimum client placement.

To prepare the Client Capabilities Summary, the counselor or placement officer can apply any rating or coding scheme that has useful meaning. In the sample form, some items have been given a three level rating scheme. For example, the capability to live independently can be rated as "independent," "quasi-independent," or "not independent." A three level rating of "high," "medium," or "low" is also suggested for many of the other client characteristics such as: interest and motivation; situational and working condition adjustment; and sensory, psychomotor, physical, and knowledge and memory capabilities. Suggested definitions for this rating scheme are:

- ✓ HIGH = the client has this capability to a high degree. For this client, capability on this parameter should not be limiting. That is, the client should be able to handle jobs listed in Volume 2 having a significant requirement for this capability.

- ✓ MEDIUM = the client has limited, but significant capabilities on this parameter. Parameters on which a client is rated "medium" should be important variables in choosing among possible job opportunities.

- ✓ LOW = the client has this capability only to a minimum extent. Only jobs having a minimal requirement for this capability should be considered.

A two-level rating scheme for the indication of the client's cognitive capabilities is suggested in the Client Capabilities Summary form. As previously described, clients with language and mathematics capabilities equivalent to GED level 2 or 3 can handle jobs having MODERATE language or mathematics requirements--as well as those having only MINIMUM language or mathematics requirements. MINIMAL language and mathematics capabilities are equivalent to GED level 0 or 1. MINIMAL perceptual processing capabilities may indicate the ability to perceive sensory inputs, but not the ability to make judgments or comparisons about them. MODERATE perceptual

CLIENT CAPABILITIES SUMMARY

NAME _____ AGE _____ SEX _____ NUMBER _____

EDUCATIONAL SUMMARY: _____

WORK EXPERIENCE SUMMARY: _____
(include workshop experience) _____

COUNSELOR _____ DATE _____

LIFE SITUATION STATUS

Current living arrangements: _____

Current economic status: _____

Physical-medical status: General _____
Special problems _____
Special capabilities _____

Legal status: _____

Motivation for employment: _____

EMPLOYABILITY STATUS

Capability for making independent career choice: _____

Capability to live independently:

	INDEPENDENT	QUASI-INDEPENDENT	NOT INDEPENDENT
Maintain health/hygiene; obtain health services			
Obtain, prepare food; maintain proper nutrition			
Obtain, maintain, wear proper clothing			
Obtain proper housing			
Maintain proper housing; provide housing care			
Manage personal finances			
Obey laws			
Resist victimization			
Participate in social interactions			
Local mobility			
Relocation mobility			
Employment processability			

COGNITIVE CAPABILITIES

	MINIMAL	MODERATE
Language capability: _____ Information source: _____	☐	☐
Mathematics capability: _____ Information source: _____	☐	☐
Perceptual reasoning capability: _____ Information source: _____	☐	☐

Figure 3. Sample Client Capability Summary

	HIGH	MED.	LOW	INFORMATION SOURCE
INTEREST, ATTITUDE, MOTIVATION				
Things and objects				
Business contact with people				
Routine, concrete, organized activities				
Social welfare, dealing/talking with people				
People and communicating ideas				
Nonsocial activities: processes, machines, etc.				
Tangible, productive results/satisfactions				
HUMAN RELATIONS CAPABILITIES				
Sales				
Service				
Communications				
SITUATIONAL ADJUSTMENT - TEMPERAMENT				
Variety and frequent change				
Repetitive, short cycle, set procedures				
Specific instruction, little independent action				
Dealing with people beyond instruction giving				
Working under stress, taking unexpected risks				
Making decisions against judgmental criteria				
Making decisions against verifiable criteria				
Attaining precise limits, tolerances, standards				
WORKING CONDITION ADJUSTMENT - TEMPERAMENT				
Inside work				
Outside work				
Both inside and outside work				
Extremes of cold plus temperature changes				
Extremes of heat plus temperature changes				
Wetness and humidity				
Noise and vibration				
Fumes, odors, toxic conditions, dust, poor ventilation				
SENSORY CAPABILITIES				
Sight				
Audition				
Touch/kinesthesis				
Taste				
Smell				
PSYCHOMOTOR CAPABILITIES				
Motor coordination				
Finger dexterity				
Manual dexterity				
Control operations				
Speed and steadiness				
PHYSICAL CAPACITIES				
Strength				
Climbing and balancing				
Stooping, kneeling, crouching, crawling				
Reaching, handling, fingering				
KNOWLEDGE AND MEMORY CAPACITIES				
Mechanical-structural				
Electrical				
Chemical				
Biological				

processing capabilities indicate that the client, as well as perceiving the sensory input, is able to make a judgment or comparison about that input.

Comments can be added for any of the parameters. One key part of the information is the identification of the basis on which the assessment is made. This permits consideration of the strength of the client assessment.

VALIDATE CLIENT CAPABILITIES DATA

There are two principal ways in which the counselor and placement officer can validate client capabilities information:

- ✓ Review records to assure that no clerical or other error has been made.
- ✓ Cross-check various sources and types of information; try to reconcile any differences that do not appear to be reasonable.

Chapter 2

ENHANCE CLIENT CAPABILITIES THROUGH TRAINING

Chapter 2
ENHANCE CLIENT CAPABILITIES THROUGH TRAINING

OVERVIEW

Figure 4 outlines in schematic form a role for employment counselors and placement officers in job training. Suggestions of activities for carrying out these functions are presented. Carrying out these functions would result in:

- ✓ Optimization of the long-range career prospects for clients.
- ✓ Involvement of the client in career decision making activities.
- ✓ Utilization of training and job performance results data in training selection decisions for clients.

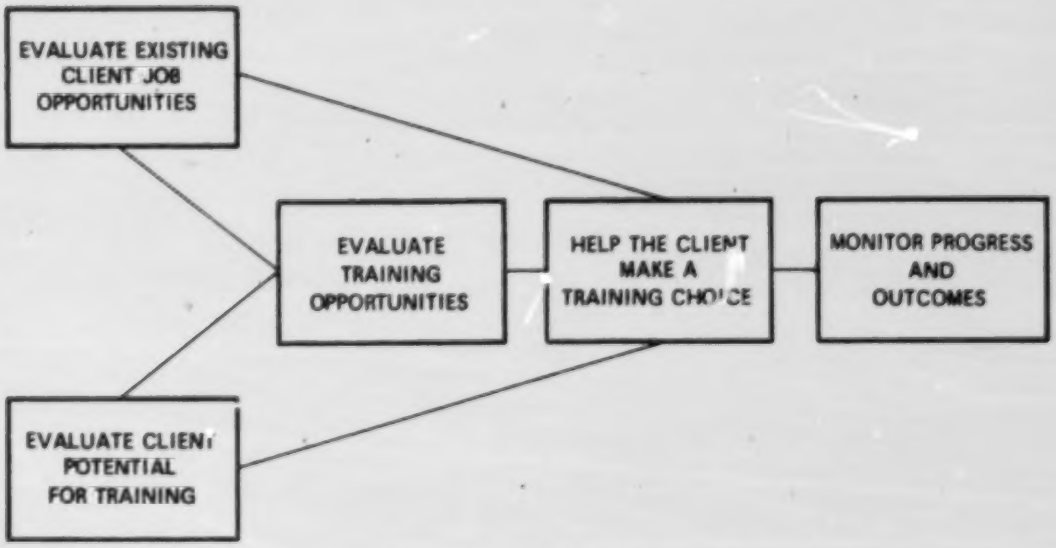
EVALUATE EXISTING CLIENT JOB OPPORTUNITIES
EVALUATE TRAINING OPPORTUNITIES
HELP THE CLIENT MAKE A TRAINING CHOICE
MONITOR PROGRESS AND OUTCOMES
EVALUATE CLIENT POTENTIAL FOR TRAINING

Figure 4. Principal Activities in Enhancing Client Capabilities through Training

EVALUATE EXISTING CLIENT JOB OPPORTUNITIES

The purpose of evaluating job opportunities that might currently be available to the client is to establish some approximate baseline against which the net value of training alternatives might be weighed. This baseline determination involves the definition of current prospects for job entry and for the long-range career prospects of these jobs.

DEFINE CURRENT PROSPECTS FOR JOB ENTRY

Experienced counselors and placement officers will, in the normal course of their support to a client, develop well informed opinions about the range of job opportunities likely to be available for a particular client. This estimate, based on an assumption of no intervening formal training, can serve as a baseline against which the potential impact of training can be judged. However, a projection of career opportunity beyond the first entry-level job is also in order before a reasonable estimate of the potential of training can be made.

PROJECT CAREER PROSPECTS WITHOUT FURTHER TRAINING

Given some estimate of the entry-level job opportunities likely to be available to a client, the counselor and placement officer should be in a position to estimate at least the more likely and obvious longer-range career opportunities that could be opened to the client. As with entry opportunities, setting a career baseline on the assumption of no additional training will help to clarify the potential net value of training.

Volume 2 of this handbook can be useful in assessing career prospects in three ways:

- ✓ The descriptions of promising occupational areas can help in identifying areas of entry opportunity and suggest the progression of opportunities with increasing cognitive demands within the area.

- ✓ The analyses of occupational areas include discussion of career potential and the relationship of this potential to training.

- ✓ Listings of occupational titles by patterns of cognitive demands summarize information about individual occupations which the counselor or placement officer may see as likely successors to entry jobs. These listings also provide easy reference to more detailed job information in the DOT.

EVALUATE CLIENT POTENTIAL FOR TRAINING

The counselor and placement officer cannot evaluate training opportunity without also considering the client's potential for successful completion of training. Such consideration involves both the base of current skills with which the client would enter training and indicators of potential to complete training successfully.

CONSIDER THE BASE OF EXISTING SKILLS

The counselor and placement officer can gain a great deal of insight about the client's existing skills from the assessment of capabilities outlined in the preceding chapter. Such a baseline of existing skills can be compared with the profile of skills defined for the completion of any given training, to establish the net learning that will be required of the client.

CONSIDER POTENTIAL TO COMPLETE TRAINING SUCCESSFULLY

The counselor and placement officer can infer from a comparison of the client's educational and training experience with existing skills something of the learning abilities of the client. These insights into client learning capabilities are essential to an effective evaluation of learning capabilities.

EVALUATE TRAINING OPPORTUNITIES

Evaluation of training opportunities for the client involves a series of judgments, including:

- ✓ Identification of training practicalities.
- ✓ Identification of career opportunities with training.
- ✓ Evaluation of net benefits of training.

IDENTIFY PRACTICAL TRAINING ALTERNATIVES

The counselor and placement officer may consider schools, workshops, human resource programs sponsored by the Department of Labor or other agencies, company schools, or on-the-job training as they relate to the various occupational areas for which the client has shown inclination and potential and in which there are likely to be career opportunities. This consideration might include the probability of meeting entry requirements, the feasibility of spending the required time in training, direct training costs, indirect training costs (e.g., wages not earned), and the probable level of achievement.

IDENTIFY CAREER OPPORTUNITIES WITH TRAINING

Given some estimate of the array of practical training alternatives, the counselor and placement officer can explore specific training possibilities in relation to occupational areas of greatest interest. Assuming successful completion of possible training, an estimate can then be made of the entry and later career opportunities open to the client.

EVALUATE NET BENEFITS OF TRAINING

The counselor and placement officer can compare the array of probable career opportunities available without and with further training. Taking costs into account, the net value training is likely to have for the client can be estimated.

HELP THE CLIENT MAKE A TRAINING CHOICE

Even though a counselor or placement officer may have a good estimate of training opportunities for a client, there may still be a significant problem in making this information available to and usable by the client in making training decisions. At least three steps are involved:

- ✓ Organizing job and training information.
- ✓ Communicating information.
- ✓ Interpreting information.

ORGANIZE JOB AND TRAINING INFORMATION

Counselors and placement officers quite rightly use their own preferred schemes for organizing data, reflecting considerations and judgments, and establishing subjective probabilities of future outcomes. Such private schemes are not necessarily designed for effective communication, especially to persons of limited cognitive capabilities. Consequently, transformation of private ways of looking at the problem into a simpler format is likely to be in order.

COMMUNICATE JOB AND TRAINING INFORMATION

The counselor and placement officer will not want to overwhelm the client with excessive job and training detail or overly sophisticated considerations. However, it is desirable that the client participate in decisions as fully as possible and such participation requires communicating as much information as the client can reasonably be expected to assimilate. The essentials seem to be that the client and/or his or her guardian understand:

✓ Career prospects without further training.

✓ Career prospects with identified types of training.

✓ The feasibility and costs of training.

The result of communication on these matters should be the establishment of priorities and a schedule for seeking job and/or specific training opportunities.

INTERPRET JOB AND TRAINING INFORMATION FOR THE CLIENT

Job entry, acceptance for training, successful completion of training, placement after training, and career opportunities are all subject to uncertainty for all of us. Consequently, the counselor and placement officer will have to be prepared to interpret, in terms the client can understand, what the chance elements are within the specific situation he or she faces. The notions of probability, risk, uncertainty, and playing-the-odds may be new and difficult concepts for persons of limited cognitive capabilities to comprehend.

MONITOR PROGRESS AND OUTCOMES

CHECK ON PROGRESS

If a client is placed in a training situation, the counselor and placement officer have at least two good reasons for obtaining progress reports from training personnel and the client. The primary reason is that the counselor and placement officer may serve a useful role in helping to diagnose or overcome difficulties or provide appropriate encouragement to the client. A secondary reason is that the counselor and placement officer may obtain useful insights that will help in the placement of future clients.

CONFER WITH TRAINING PERSONNEL

The counselor and placement officer may be helpful to training personnel in setting objectives and expectations for the client, in providing insights into the special characteristics of the client, in diagnosis of training difficulties, and in working out alternatives to plans that are not proving feasible or sufficiently productive. It is essential, of course, that counselor and placement officer maintain the role of helpful aid, where wanted, and not give any impression of unwarranted interference.

CONFER WITH THE CLIENT

Persons with limited cognitive capabilities may well be easily discouraged because of a long record of educational frustration and failure. The counselor and placement officer can serve as a source of encouragement and reassurance. Also, persons of limited cognitive capabilities tend to have special difficulties in responding flexibly to changing situations and goals. As training experience unfolds, there may be a need for revised planning. The counselor and placement officer can play a useful role in helping the client to be flexible, positive, and effective in such ongoing planning.

Chapter 3

IDENTIFY JOB OPPORTUNITIES

Chapter 3
IDENTIFY JOB OPPORTUNITIES

OVERVIEW

This chapter describes how to identify an extended range of jobs for persons with only limited cognitive skills--through looking at existing information with a new sensitivity, and through ferreting out new job information. Actions useful in identifying job opportunities are shown in Figure 5.

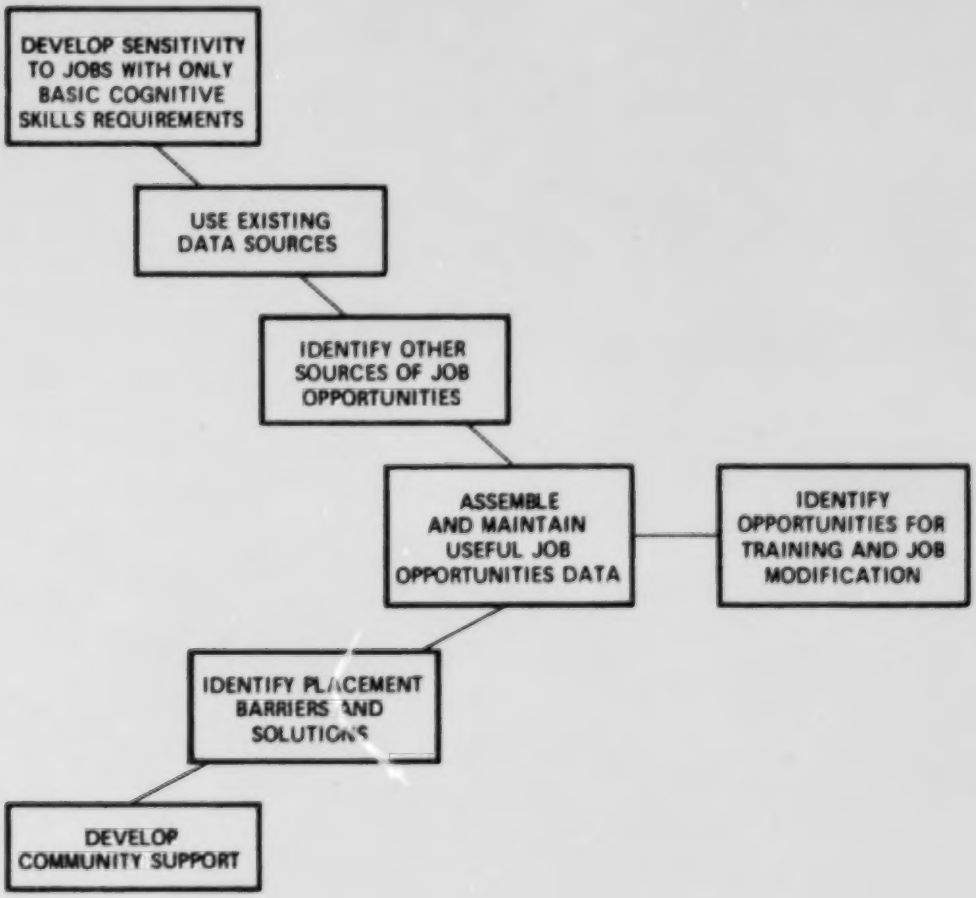
DEVELOP SENSITIVITY TO JOBS WITH ONLY BASIC COGNITIVE SKILLS REQUIREMENTS
USE EXISTING DATA SOURCES
IDENTIFY OTHER SOURCES OF JOB OPPORTUNITIES
ASSEMBLE AND MAINTAIN USEFUL JOB OPPORTUNITIES DATA
IDENTIFY OPPORTUNITIES FOR TRAINING AND JOB MODIFICATION
IDENTIFY PLACEMENT BARRIERS AND SOLUTIONS
DEVELOP COMMUNITY SUPPORT

Figure 5. Principal Activities in Identifying Job Opportunities

DEVELOP SENSITIVITY TO JOBS WITH ONLY BASIC COGNITIVE SKILLS REQUIREMENTS

Within the major purpose of this handbook--to expand the range of jobs available to persons having only basic cognitive skills--is the need to increase general awareness, but also awareness on the part of counselors and placement officers, of jobs which have only basic cognitive skills requirements. Recognition of such jobs is imperative if the range of jobs for the limited cognitive skills population is to be expanded beyond that which is traditionally available.

USE VOLUME 2 TO INCREASE SENSITIVITY TO JOBS WITH ONLY BASIC COGNITIVE SKILLS REQUIREMENTS

An increased sensitivity to jobs with only basic cognitive skills requirements can come about through application of a consistent set of parameters which serves to define job requirements. Such a set of parameters has been used to select the occupational titles included in Volume 2, as well as to provide structure for the content of the volume. The occupational titles listed in Volume 2, which are extracted from the *Dictionary of Occupational Titles* (DOT), are restricted in two basic parameters: the General Educational Development (GED) level and the Specific Vocational Preparation (SVP) level.

CONSIDER THE COGNITIVE REQUIREMENTS FOR JOBS USING ONLY BASIC SKILLS

The GED reflects a level of reasoning development required for job performance. The GED is rated on a seven-point scale, with lower numbers indicating a lesser level of required development and higher numbers indicating a greater level of required development. Within the Volume 2 job listings, GED is restricted to a level of "3" or less. This restriction means that these are jobs that: (a) require no more than an application of commonsense understanding to carry out instructions, (b) require dealing with only several concrete variables from standard situations. These are upper limits of the jobs included; many of the jobs listed have much lower requirements than these. A great variety of occupational areas is represented within these bounds. A given GED level can be variously achieved--through formal education, independent study, or simply through dealing with everyday life situations.[9]

CONSIDER THE LIMITED TRAINING REQUIRED FOR JOBS USING ONLY BASIC SKILLS

The SVP reflects the training required for job performance. SVP is rated on a nine-point scale, with lower numbers indicating a lesser amount

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[9] See pages 18 through 23 of this volume of the handbook for a more complete definition of GED levels and page 11 of Volume 2 for full definition of SVP. These definitions are also provided in Appendix B of Volume II of the DOT.

of training and higher numbers indicating a greater amount of training. Within the Volume 2 listings, SVP is restricted to a level of "5" or less. At the upper end, this limits the amount of training required--to learn necessary techniques, to acquire the necessary information, and to develop the facility needed for average performance--to no more than one year. At the lower limit of SVP, jobs may require no more than a short demonstration for achieving the requisite level of performance. Training may be acquired in a variety of environments: vocational education, apprentice training, in-plant training, experience in other jobs. The training could occur in a variety of settings: school, work, military, institutional, or even through avocational interests. The occupational titles listed in Volume 2 provide concrete examples of the domain of worker roles which lie within the one-year training time restriction.

USE EXISTING DATA SOURCES

Use existing information about jobs and job openings as a source for identifying jobs having only basic skill requirements.

SEARCH FORMAL AND INFORMAL INFORMATION NETWORKS ABOUT JOB OPENINGS

MAKE USE OF OWN FILES ON JOB OPPORTUNITIES INFORMATION

The information about job opportunities contained in the files of counseling and placement offices is the richest and most valuable source of information available for identifying job opportunities. These files are the basis on which the most immediate opportunities can be identified; they are also a valuable source for the derivation of other opportunities.

Job files of counseling and placement offices will be more realistic than any other source of information in defining relevant opportunities since they reflect local employment conditions and needs. However, the very richness of the counseling and placement office job files may impede the search for job opportunities for the limited cognitive skills population--simply because the scope of jobs on file will almost always exceed that which is appropriate to the population. For this reason, job openings must be carefully scrutinized so that neither a restrictive nor an over-generous stance is taken in determining appropriate jobs.

TAKE ADVANTAGE OF SPECIAL PROGRAMS FOR EMPLOYMENT OF LIMITED SKILLS PERSONS

The Federal government actively supports the employment of economically disadvantaged and physically and otherwise handicapped persons through a variety of programs, including a special hiring program for the mentally retarded. Federal agencies across the country participate in this program. The Civil Service Commission coordinates the program. Participating Federal agencies make known full information about the positions available, including titles, grade levels, and job responsibilities.

The U. S. Department of Labor funds the On-the-Job Training Project which is administered by the National Association for Retarded Citizens (NARC). The project encourages business to provide opportunities for the mentally retarded. The NARC role is both administrative and fiscal: it assists businesses in finding occupational areas where retardates can function; it reimburses an employer one-half of the entry wage for the first four critical weeks of employment, and one-fourth of the entry wage for the second four weeks of employment.

Other Federal programs support the employment of economically disadvantaged persons by, for example, making funds available to state and local governments, by providing funds for training and employment of welfare recipients, and by supporting the permanent employment and upgrading of economically disadvantaged but currently employed persons.[10] Some of the limited cognitive skills clients will qualify for such support. Counselors and placement officers will need to be familiar with qualifying guidelines. Such programs change from time to time since they are a result of Presidential or Congressional actions. Federal Job Information Centers can provide current information about job opportunities available through such programs.

A number of state governments have also initiated similar programs and this can be expected to increase in the future. All of the states have implemented a Governor's Committee on Employment of the Handicapped which can be contacted for information. Or, the state Personnel Office can provide information about the state's special programs.

Some private businesses and industries have taken strong steps in employing limited skills persons. Federal financial support through the Job Opportunities in the Business Sector (JOBS) Program has assisted in these efforts. The National Alliance of Businessmen (NAB) was established to support the effort and is a good source of information about such employers in major cities. Many smaller cities have developed similar associations.

The President's Committee on Employment of the Handicapped, the President's Committee on Mental Retardation, and the NARC all work diligently and effectively to increase opportunities for their client groups. These organizations have available a number of good publications which can be useful in identifying job opportunities. State offices of the Association for Retarded Citizens (ARC) act as an information network providing information about activities and employment opportunities throughout the state. Local ARC chapters can assist in identification of real and potential employment opportunities within their geographic area.

MAKE USE OF SPECIAL JOB BANK INFORMATION, IF AVAILABLE

The Manpower Administration of the Department of Labor has initiated computerized job banks in many larger cities. The job bank provides information about local job opportunities. Job bank listings are updated daily

[10] Current examples of such programs are the Public Employment Program (PEP), the Work Incentive Program (WIN), and the Public Service Careers Program (PSC).

and distributed to all local Employment Security Offices and to cooperating community agencies in the area. Variations exist among the established job banks, but they all allow access to sets of job openings on the basis of client capability and interest. The local Department of Employment Security can provide information about the availability and use of job bank information. The U. S. Department of Labor publishes a monthly guide, *Occupations in Demand*, compiled from the Employment Service's Job Bank computer. The guide lists the 150 jobs most frequently offered during the previous month and is the first large-scale national effort designed specifically to identify what jobs are available, what they pay, and where they are located.

USE VOLUME 2 TO IDENTIFY OPPORTUNITIES NOT USUALLY CONSIDERED

Volume 2 of this handbook provides descriptive information about placement opportunities associated with occupational areas and industries. This portion of the handbook aids identification of industries which have jobs that require only basic cognitive skills. Some of these may be local industry types not usually considered to have opportunities for persons with only basic cognitive skills.

IDENTIFY OTHER SOURCES OF JOB OPPORTUNITIES

There are several other practical and simple ways that counselors and placement officers should consider in expanding the range of job opportunity information beyond that found in usual placement data sources.

MAKE USE OF LOCALLY PREPARED EMPLOYMENT INFORMATION

Even an extensive file on job opportunities may not include the full range of occupations which are available or might become available for the client population. There is often locally prepared information which can be used. Especially in large metropolitan areas there will usually be multiple sources for present and projected data about employment conditions and opportunities. Such reports are prepared by specific industries, labor unions, banks, large private employers, colleges and universities, and private institutions and foundations.

The State Employment Service periodically prepares labor market information. Data types may vary from location to location and from time to time. One basic data set prepared by the State Employment Service is the bi-monthly Labor Area Report which is based on information from employers about current employment and prospective occupational shortages, unfilled openings, plant expansions and contractions, and layoffs.

Even in smaller communities, similar information may be available through such organizations as the Chamber of Commerce, the Jaycees, or other civic-minded groups. These groups may not have formal data about employment

opportunities. But, their membership is usually out of the business/commerce community and they have first-hand knowledge of employment conditions and opportunities.

The Yellow Pages of the telephone directory is another good source of information about local employment opportunities. Major forms of commerce and industry can readily be identified by merely paging through. Many of the directory headings will match those of the industry designators contained in Volume 2.

USE MEDIA REPORTS TO KEEP UP WITH CURRENT AND FUTURE EMPLOYMENT OPPORTUNITIES

In order to maintain a realistic picture of job opportunities, and particularly to be aware of potential job openings, it is necessary to keep abreast of job structures and changes which result from technological advances. Since Volume 2 is based on information about existing jobs, the data contained there cannot satisfy this need. Both national and local news reports can be useful in identifying potential opportunities. While news stories most frequently report what has happened, they also provide information about expected events. Thus, news about plant expansions, future plant openings, new services coming to the community, all will be valuable information for identifying job opportunities.

USE PUBLISHED REPORTS ABOUT THE WORLD OF WORK FOR FORECASTING JOB OPPORTUNITIES

Use annual forecasts of job opportunities and the outlook for industries provided by a number of Federal agencies to project job opportunities. The *Manpower Report of the President*, prepared annually by the Department of Labor's Employment and Training Administration in cooperation with other agencies and bureaus, presents detailed analyses of the employment picture as well as making projections for changing patterns of occupational opportunity.

The *Occupational Outlook Handbook*, published annually by the Department of Labor's Bureau of Labor Statistics, provides reports on different fields of work for the employment outlook in terms of workers and also for industries. The outlook for occupations is keyed to the job titles and numbers contained in the DOT.

The *Standard Industrial Classification Manual*, prepared periodically by the Statistical Policy Division of the Office of Management and Budget (OMB), presents industrial statistics not only to show how industries have done over the past years, but to identify emerging and rapidly growing industries.

USE PAST PLACEMENTS INFORMATION TO IDENTIFY RELEVANT JOB OPPORTUNITIES

Published reports of where basic skills workers have been employed are of value. The Civil Service Commission has made available a list of examples

of government jobs in which the mentally retarded have been employed.[11] The *Guide to Jobs for the Mentally Retarded*[12] presents 134 job profiles within 24 job families, all based on information about types of jobs being handled by the mentally retarded. The President's Committee on Employment of the Handicapped has prepared a list of 100 jobs mentally retarded persons are handling in the private sector.[13] While all of these sources profile the more traditional types of work opportunities afforded the limited skills population, they nevertheless represent viable opportunities.

COORDINATE PLACEMENT EFFORTS WITH OTHER COUNSELORS AND PLACEMENT OFFICERS

Knowledge of what other counselors and placement officers have achieved in expanding the range of jobs available to the limited skills population will be especially valuable. A good exchange of information about where limited skills workers have been placed probably requires something beyond that which gets into print. Much is to be gained through informal discussion and correspondence with others functioning in this placement capacity.

DEVELOP COMMUNITY SUPPORT

Utilization of the results of improved identification of job opportunities will almost certainly require increased levels of community support. Employers and influential community leaders are focal points for expanding job opportunities for the client population

CONTACT EMPLOYERS

Many employers may be unaware of the role they could play in making jobs available to limited skills workers. They are not likely to provide opportunities unless encouraged and aided by outside influence.

CONVINCE EMPLOYERS OF THE BENEFITS OF HIRING PERSONS WITH LIMITED COGNITIVE SKILLS

Employers will be interested in providing job opportunities to persons with only selective cognitive skills only if they can be convinced that the operations for which they are responsible will benefit by employment of such persons. One of the strongest arguments that can be made for hiring persons with limited cognitive skills is that they make effective, loyal, and satisfied workers. If employers can be convinced of this, they will see the cost-effectiveness of hiring them.

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[11] United States Civil Service Commission, Office of Public Policy Employment Programs, Manpower Services Division, BRE. *Employment of the mentally retarded in federal service.* Washington, D. C.: U. S. Government Printing Office (GPO#724-174/863-1), 1971.

[12] Peterson, R. O., & Jones, E. M. *Guide to jobs for the mentally retarded.* (Rev. Ed.) Pittsburgh: American Institutes for Research, 1964.

[13] Fraenkel, W. A. *Preparing for work.* Washington, D. C.: The President's Committee on Employment of the Handicapped. (Undated)

GAIN EMPLOYER SUPPORT AT ALL LEVELS

Initial efforts at promoting increased opportunities should be directed to top management where policy statements favoring such hiring can be initiated. However, it is middle management which must implement these policies, and it is the rank-and-file workers who must accept the limited skills population as co-workers. Unless there is a positive attitude generated about the presence and performance of limited skills workers--from top to bottom echelons of a company--interest in and opportunity for these workers may never be achieved. Or, if achieved at one level, may be destroyed at another.

TAKE ACTIONS TO ENSURE ENDURING ACCEPTANCE OF THE LIMITED SKILLS WORKER

Counselors and placement officers may need to assume responsibility for helping employers with placement and early stages of employment of those with limited skills. The steps to be taken will necessarily vary from situation to situation. Some general guidelines to follow are:

- ✓ Approach employers optimistically. Be sure there is understanding of the client population which is addressed. There is often apprehension about people who seemingly differ in some way from those normally encountered. Employers should be encouraged to focus on similarities rather than differences between these and other employees.

- ✓ Become aware of other efforts the employer may have taken to initiate novel hiring practices. The employer may have taken earlier steps to employ disadvantaged or minority workers. These could be good or bad experiences; but whether good or bad, there is some transfer of learning to be gained.

- ✓ Encourage employers to examine the real rather than the traditional entry requirements for a job. For example, a high school diploma is often a traditional rather than a real requirement.

- ✓ Employers may not feel that their job structure permits the employment of persons with limited skills. In fact, some restructuring of job responsibilities may be required. Be prepared to assist or guide the employer in restructuring job responsibilities to achieve appropriate job opportunities. Restructuring may be required to: (a) sort out a set of lower skill activities from a position which includes a range of responsibilities varying widely in skill requirements; (b) to overcome an anticipated rejection of the limited skills person by those of higher capability, long tenure, or advancement to a position through experience and upgrading. Guidance for job restructuring is provided in the next Chapter, DEVELOP JOB OPPORTUNITIES.

- ✓ Emphasize the client population's assets, but also discuss its limitations. Otherwise, immediate placements may be negatively affected by employment situations which make excessive demands. These failures may preclude the future employment of similar clients.

- ✓ Encourage in-plant on-the-job training within the company to assure adequate preparation for job performance. In areas of industrial concentration, employers could be encouraged to provide such training on an industry-wide basis.

- ✓ Emphasize the cost-effectiveness of employment of limited skills workers. Make employers aware of the job responsibility they assume, the loyalty they demonstrate, and their job satisfaction which leads to increased tenure of employment.

- ✓ Use testimonials of successful placement efforts to convince employers of the benefits of employment of limited skills persons and to elicit employers' support in improving not only the placement but the on-the-job performance.

- ✓ Enlist the support of the NAB or similar local groups. Encouragement from business people will be more effective than from agency personnel.

- ✓ Enlist the support of parents and other relatives of the clients. Many of these persons are in business or in the professional ranks and therefore are in positions to take or promote employment actions.

- ✓ Continue the contact with the employer beyond the stage of initial placement so that there is an avenue for working out any problems that may arise.

INVOLVE THE LARGER COMMUNITY

Direct dialogue with employers will have greater impact if the force of community leadership and the interest of the general public are brought to bear. Counselors and placement officers may need to elicit the support of their own management in preparing a public relations effort to promote the employment of limited skills clients.

CONTACT INFLUENTIAL COMMUNITY LEADERS

Schools, parents, civic groups, social agencies, action groups, and other people already knowledgeable about the problems of placement of persons with limited skills are likely to be willing and effective supporters. School officials and counselors, especially those dealing with students who have learning difficulties, may have contact with employment sources which can be further developed. Representatives of social agencies, action groups,

and others may further help to identify job sources. Knowledgeable professional people, politicians, and local government representatives may also support the effort to identify job opportunities and to promote action in this direction on the part of state and local legislative bodies.

INFORM THE GENERAL PUBLIC

A public relations effort in the community can make the public aware of the client population's potential for employment and job performance. The assistance of influential community leaders can be effective in changing the image the community in general holds regarding persons with limited cognitive skills, especially the image of the retarded. Key actions which can be taken to gain the general public's support include:

- ✓ Attending meetings of various community organizations, including social, civic, professional, business and fraternal, and educational institutions and associations.
- ✓ Preparation and production of pamphlets and other publications which can be distributed to those with potential or demonstrated interest.

The general public should be made aware that the costs incurred in supporting the client population can be considerably reduced through their becoming economically independent, or even partially so. Communication should be in terms of client abilities rather than client limitations, and the public should be made aware of different types and levels of the client population competencies.

IDENTIFY PLACEMENT BARRIERS AND SOLUTIONS

The attempt to increase job opportunities for persons with only limited cognitive skills may encounter serious barriers. These may be varied in nature. But, many of the barriers are predictable and efforts to overcome expected barriers can sometimes be worked out in advance, and the problem averted.

PROMOTE COMMUNITY AWARENESS OF SOCIAL RESPONSIBILITY

The responsibility of the general citizenry and of varied organizations for providing equitable opportunities for all citizens has only recently come widely into play. Although legislation can provide that opportunities shall be available, large segments of American society may not fully acknowledge that responsibility. Many persons, and even many employers, remain unaware of, or avoid the steps necessary to make the legislation take effect. Counselors and placement officers should make themselves fully aware of current legislation concerning employment of handicapped and limited capabilities persons. Good sources for this information at the national level are: The President's Committee for Employment of the Handicapped, the President's

Commission on Mental Retardation, and the national headquarters of the NARC. At the local level, the U. S. Employment Service and the local capter of ARC can provide current information of state and local legislation.

Counselors and placement officers must be able to communicate that a responsibility for effective use of human resources is a real part of the mainstream of social responsibility. Once comprehension is achieved, it may be necessary to assist in the operationalization of the concept by identifying ways in which the community, employers, and the public at large can demonstrate acceptance at the operational, rather than the conceptual level. Identification of job opportunities is a first step. Interaction with employers and local citizenry to make them aware of real, and locally available, job opportunities their own limited skills members can perform is a second, more difficult, but necessary step.

DEVELOP EMPLOYER AWARENESS OF DIFFERENCES IN COGNITIVE SKILLS

CONVINCE EMPLOYERS THAT BOTH INDIVIDUALS AND JOBS VARY IN COGNITIVE SKILL TYPES AND LEVELS

There is a tendency for employers to not only hire the most qualified job applicant, but also to view cognitive skills of any given person as uniform. Employers may need to be convinced that not only do individuals vary by possessing different levels of different cognitive skills, but that jobs also vary in the type and level of cognitive skill required. This concept is basic to the structure of the occupational listings in Volume 2 and can be used as an effective demonstration to employers of how jobs vary with respect to cognitive skill demands.

CONVINCE EMPLOYERS THAT MANY JOBS REQUIRE NO SIGNIFICANT COGNITIVE SKILL

Job analysts have determined that a great number of jobs can be performed effectively with only very minimal levels of cognitive skills. There are approximately 4,000 occupational titles listed in Volume 2 that require no significant cognitive skills. These are occupational titles listed under the "MINIMUM" requirements for language, mathematics, and perceptual processing capabilities. Since the occupational titles are listed within occupational groupings, these lists can be selectively used to demonstrate to a given employer that jobs that make no significant cognitive demands exist within that sphere of work.

CONVINCE EMPLOYERS THAT SOME JOBS REQUIRE ONLY A MINIMAL LANGUAGE CAPABILITY

Within the definition of MINIMUM language development applied here, there are no job opportunities defined for persons who are totally lacking in language ability. This is because the lowest definition of language ability (GED level of 0) requires language comprehension to a level to learn job duties--and there are no jobs without a requirement for some set of job duties to be learned.

However, within the definition of MINIMUM language development (GED level 0 or 1), persons with minimal language development can comprehend and express themselves to a level to learn job duties, write simple identifying information, and make simple written or oral statements. In addition to the 4,000 occupational listings in Volume 2 with no significant cognitive requirements, there are nearly 2,200 occupational listings with only MINIMUM language requirements. These jobs do, however, make MODERATE demands for mathematics or perceptual processing capabilities, or both.

Persons with slightly greater language development--but still limited to Moderate skill, i.e., GED level 2 or 3--can file things, post data, conduct simple interviews, and act as tour guides, for example. There are an additional 2,500 listings in Volume 2 which make language demands no greater than these. These listings may or may not make significant demands for mathematics and perceptual processing capabilities.

The occupational listings in Volume 2 which carry a MINIMUM language requirement can be used with prospective employers to demonstrate the range of jobs which persons of limited language competencies can handle. Within an occupational category, comparison of occupational listings with MINIMUM and with MODERATE language requirements can be used to demonstrate how requirements for language capabilities vary from job to job.

CONVINCE EMPLOYERS THAT SOME JOBS REQUIRE ONLY A MINIMAL MATHEMATICS CAPABILITY

Persons with Minimal mathematical development (GED level 0 or 1) can perform simple counting and recording of numbers and make simple arithmetic calculations. In addition to the nearly 4,000 occupational listings in Volume 2 with no significant cognitive requirements, there are more than 2,200 additional occupations which make no mathematical demands greater than counting, recording numbers, and simple calculations. These jobs may make MODERATE language or perceptual processing demands, or demands in both language and perceptual processing.

Persons with slightly greater, but still Moderate mathematical ability (GED level 2 or 3), can handle calculations in fractions, decimals, and percentages. The remaining 2,500 listings in Volume 2 identify job opportunities which make mathematical demands no greater than these. These jobs may or may not carry a requirement for significant language and perceptual processing capabilities

The occupational listings in Volume 2 which carry a MINIMUM mathematics requirement can be used with prospective employers to demonstrate the range of jobs which persons of limited mathematical capabilities can handle. Within an occupational category, comparison of occupational listings with MINIMUM and with MODERATE mathematics requirements can be used to demonstrate how requirements for mathematics capabilities vary from job to job.

CONVINCE EMPLOYERS THAT SOME JOBS IMPOSE NO PERCEPTUAL PROCESSING REQUIREMENT

There are nearly 6,100 occupational titles in Volume 2 which make no demand for any type of perceptual discrimination or comparison. The key here is discrimination or comparison. That is, jobs with a MINIMUM requirement for perceptual processing may or may not require one or more sensory input--but they do not require any reasoning on that input. These occupations may make some MODERATE language demands or MODERATE mathematics demands, or both.

The remaining 2,650 occupational titles in Volume 2 carry perceptual reasoning requirements to a level of: making relatively fine perceptual discriminations or comparisons to a mental image representing a correct configuration. Requirements are most often for visual discriminations or comparisons, but may also be sound, touch, taste, or smell requirements.

The occupational listings in Volume 2 which carry a MINIMUM perceptual processing requirement can be used with prospective employers to demonstrate the range of jobs which persons of limited perceptual processing competencies can handle. Within an occupational category, comparison of occupational listings with MINIMUM and with MODERATE perceptual processing requirements can be used to demonstrate how requirements for perceptual processing capabilities vary from job to job.

ASSIST THE EMPLOYER IN DEVELOPING CLIENT SKILLS

ASSURE THE CLIENT'S SOCIAL AND LIVING SKILLS

The ultimate goal in the search for job opportunities is to provide an employment situation which makes demands compatible with the client's capabilities. The client's ability to adjust to the job environment must be determined by the counselor prior to placement. Guidance for assessing this aspect of the client's employability is provided in the Chapter entitled DETERMINE CLIENT CAPABILITIES. The employer should assume some responsibility for the development of job skills for the limited skills employee--just as for any other type of employee. But, development of social and living skills should not be the employer's primary responsibility.

GUIDE THE EMPLOYER TO AN APPROPRIATE SOCIAL RESPONSIBILITY ROLE

Given that the requisite level of social and living skills is achieved by the client, there is still an interaction in an employment situation--with supervisors and co-workers--for which the employer must take some responsibility. This interaction and development of the potential of limited skills employees will be somewhat different than for the more traditional employee. Without some guidance, even in large companies, this role may be beyond the capability of those who routinely manage personnel. While the case should not be made so strongly as to turn prospective employers away

from hiring persons of limited cognitive skills, employers will need to recognize that greater and different attention may need to be given if proper job adjustment is to be achieved--if for no other reason than employment may be a new life style for these employees.

One successful approach taken to help the nontraditional employee is the "job-coach" concept initially adopted by the JOBS NOW project in Chicago. The job-coach is an emphathetic individual who acts as an interacting agent between the job-trainee and the employer. The job-coach aids the job-trainee in adjusting to the world of work, and assists the employer in dealing with problems that the job-trainee presents. Some employers have found success with the "buddy system" in which an experienced worker takes responsibility for the nontraditional employee.

The need for and ways to provide such continuing support for disadvantaged employees have been well explored and reported through experimental and demonstration (E & D) projects authorized under the Manpower Development and Training Act. Two publications of the W. E. Upjohn Institute for Employment Research presents useful guidance for meeting this need.[14, 15]

The key guidance to be gained from all of the above approaches and sources of information is that the job counselor or placement officer will likely need to work with the employer in effecting an adequate work adjustment for the limited skills employee and also for co-workers.

ASSIST EMPLOYERS IN ESTABLISHING REALISTIC CAREER STRUCTURES FOR LIMITED SKILLS EMPLOYEES

The tendency for employers to select the most qualified candidate for a position not only restricts hiring of those with limited skills, but precludes a realistic career structure for them if they are hired. Limited skills employees may have neither the need nor the ability to progress along a career ladder structure to a level to which traditional employees may aspire. Some reorganization of the career ladder structure may be required to adjust to this difference between limited skills and traditional employees.

Two features of the structure of Volume 2 make it useful in guiding employers in building appropriate, but limited, career structures for these employees. First, within the occupational groupings, specific guidance is provided concerning aspects of career structure and job mobility for each of the occupational areas identified. Second, the occupational titles are listed on the basis of increasing cognitive skills requirements. This structure permits counselors and placement officers to make a projection of realistic career opportunities for limited cognitive skills clients within a given occupational setting.

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[14] Burt, S. M., & Striner, H. E. *Toward greater industry and government involvement in manpower development.* Kalamazoo, Michigan: W. E. Upjohn Institute for Employment Research, 1968.

[15] Fine, S. A. *Guidelines for the employment of the culturally disadvantaged.* Kalamazoo, Michigan: W. E. Upjohn Institute for Employment Research, 1972.

ASSIST EMPLOYERS IN OVERCOMING CO-WORKER RESISTANCE TO THE LIMITED SKILLS EMPLOYEE

Even when employers have accepted the responsibility for hiring nontraditional employees, the threat to co-workers can be so severe as to invalidate these efforts. Resistance will, of course, be greatest when unemployment is high. Once employers assume a responsibility for opening up job opportunities for persons with limited cognitive skills, they will need to educate and motivate workers so that they share this responsibility. Efforts parallel to those required to develop a community responsibility will be necessary within individual employment situations. These actions must be taken prior to placement of the individual if they are to be effective.

GAIN LABOR UNION SUPPORT FOR EMPLOYMENT OF PERSONS WITH LIMITED COGNITIVE SKILLS

In industries where labor unions are involved, effective identification of job opportunities will not occur without their concurrence. Union representatives will need to understand how this function can be compatible with union objectives. Unions are more likely to support hiring of nontraditional workers if two conditions are met: (a) if modified hiring practices are initiated on the basis of increased efficiency rather than as an effort to hire the disadvantaged or limited skills client, and (b) if new workers expand union membership and are fitted into the existing bargaining structure, thereby strengthening the union.

Cooperative union, management, and employment counselor action to identify job opportunities in such a way that traditional union structures and positions are not threatened will be a necessity when unions are involved in the employment environment. In order to achieve this, counselors and placement officers will need to achieve an understanding of union organizations and how they function. The unions themselves, individual union members, the National Labor Relations Board (NLRB), and the Bureau of Labor Statistics (BLS) all can contribute to knowledge of how individual unions are structured and function.

It is just as important to generate a positive attitude toward employment of limited skills persons from top to bottom echelons of the union as it is for all levels of management. Initial efforts should be directed to union officials. Once union leaders have accepted increased employment opportunities for persons of limited cognitive skills, they will communicate this policy down to the union rank and file.

ASSEMBLE AND MAINTAIN USEFUL JOB OPPORTUNITIES DATA

Information about job opportunities will be useful only if it meets the criteria of timeliness, currency with job technology, relevancy to local conditions, and data manageability.

TREAT JOB OPPORTUNITIES DATA AS DYNAMIC RATHER THAN STATIC INFORMATION

Current job opportunities information can be useful in developing future job opportunities. Successful placements in one type of position may encourage employers to find additional opportunities. The willingness of one employer to accept the limited skills worker may act as a springboard for other employers to follow suit. Identification of opportunities in one type of industry or business may lead to identification of opportunities in similar industries or in businesses having similar functions or activities. The occupational listings in Volume 2 should be a valuable tool for identification of such potential growth of placement opportunities.

Just as the effects of prior placements can solidify the utilization of persons with limited skills, changes in technology can be exploited to evolve new opportunities. The identification of such opportunities may come from employers themselves, especially those having satisfactory experiences in employing limited cognitive skills workers. But, development of such opportunities is much more likely to occur if counselors and placement officers work jointly with employers.

MAINTAIN LOCAL JOB OPPORTUNITIES INFORMATION

Job files, for any set of clients, will be useful in placements only as they attend to local employment conditions. A broad approach to identification of job opportunities is necessary as an initial step so that not only the obvious but the less apparent opportunities are identified. This effort should be followed by a narrowing down to those situations which are realistic with respect to local industry and, particularly, to those employers and employment situations in which current or near current opportunities for the client population can be identified.

SELECTIVELY MAINTAIN JOB OPPORTUNITIES DATA FOR LIMITED COGNITIVE SKILLS CLIENTS

When job opportunities are identified through any or all of the above actions, an efficient and client-responsive method will be required for storing and accessing the information. There is no one correct method for handling this information. Counselors and placement officers have preferences and established systems for job files. There are, however, two important and basic aspects to maintaining this information. First, the data should be current, reflecting all relevant actions and information involving referrals, placements, nonplacements, contact persons, etc. Second, the system should allow for distinction of these versus other types of job opportunities not appropriate to the limited skills client. Otherwise, a repetitive search will be required through the whole file system of job opportunities each time a client with limited cognitive skills is to be served.

IDENTIFY OPPORTUNITIES FOR TRAINING AND JOB MODIFICATION

There are natural built-in limits to the extent to which relevant opportunities can be defined for the client population. As shown by Volume 2, however, the potential opportunities far exceed those currently acknowledged by employers. While cooperative employers may readily indicate openings for persons with limited cognitive skills, the availability of job opportunities could be greatly enhanced through employee/trainee programs and through job modification.

IDENTIFY TRAINING OPPORTUNITIES

The limited cognitive skills population is no different with respect to enhancement of employability through training than any other client population. There are, of course, different considerations to be made in the selection of appropriate training. Guidance for increasing the employability of the limited skills client through training is presented in Chapter 2.

IDENTIFY JOB DEVELOPMENT OPPORTUNITIES

Jobs exist in a great variety of forms. From setting to setting, sets of associated jobs are very differently configured with respect to tasks and responsibilities. Reassembly of job requirements and provision of job aids are two key methods which can be used to create jobs appropriate to the limited cognitive skills population. Activities and techniques for developing job opportunities in these and other ways are discussed in the next Chapter, DEVELOP JOB OPPORTUNITIES.

Chapter 4

DEVELOP JOB OPPORTUNITIES

Chapter 4
DEVELOP JOB OPPORTUNITIES

OVERVIEW

In the broadest sense, "job development" encompasses the total placement process, including the identification of existing job opportunities addressed in the previous Chapter and the whole set of client and client-employer related activities addressed in this and the other Chapters of the handbook. A much narrower interpretation is given to the development of job opportunities in this Chapter: the focus is on the creation of new opportunities through job redesign and restructuring, and on ways to support the employee with limited skills in the work situation. Figure 6 presents an overview of the activities which can be used with employers to assist them in developing and sustaining job opportunities within the limited job development framework addressed here.

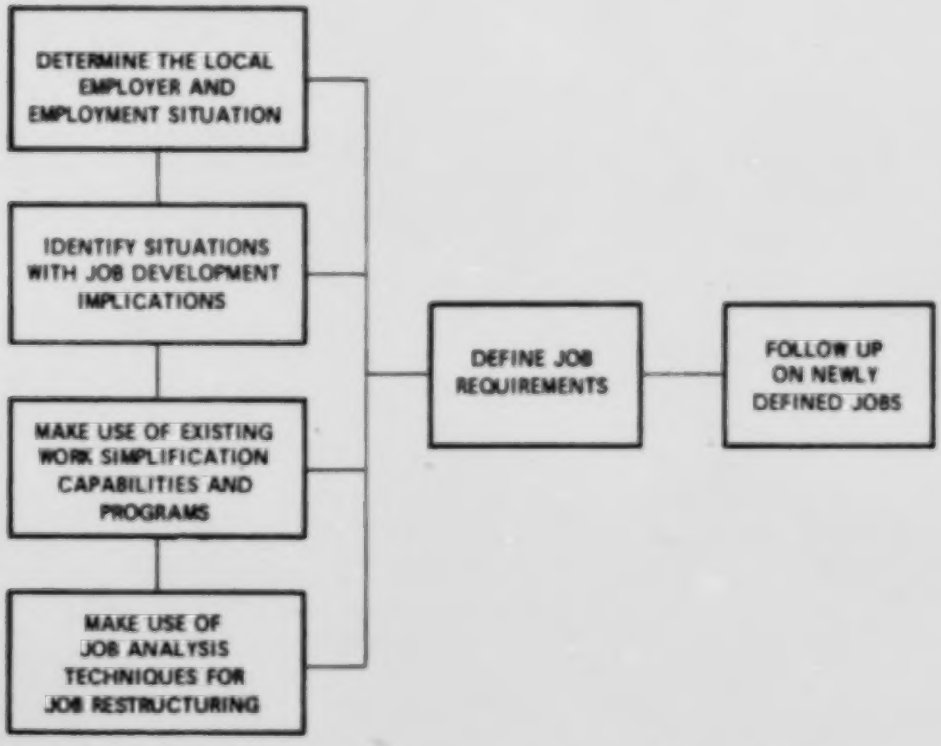
DETERMINE THE LOCAL EMPLOYER AND EMPLOYMENT SITUATION
IDENTIFY SITUATIONS WITH JOB DEVELOPMENT IMPLICATIONS
MAKE USE OF EXISTING WORK SIMPLIFICATION CAPABILITIES AND PROGRAMS
MAKE USE OF JOB ANALYSIS TECHNIQUES FOR JOB RESTRUCTURING
DEFINE JOB REQUIREMENTS
FOLLOW UP ON NEWLY DEFINED JOBS

Figure 6. Principal Activities in Developing Job Opportunities

DETERMINE THE LOCAL EMPLOYER AND EMPLOYMENT SITUATION

Use of a formal survey is not intended, especially in early stages of development of job opportunities. Initially it is best to rely on personal contact with employers, building rapport and community acceptance, and commitment to expanding job opportunities for the target population. Once some success in job development has been achieved with selected employers, mail or telephone surveys and contacts may be useful in expanding the set of employment situations.

WORK WITH EMPLOYER CONTACTS TO IDENTIFY JOB DEVELOPMENT OPPORTUNITIES

Employers accustomed to calling on outside placement services for filling job openings may be more open to expanding job opportunities than employers who satisfy their hiring needs independently. Information gained in the process of providing placement services--knowledge of key persons in an organization, the organizational structure, the type of work performed, and the positions usually available--presents an advantageous framework within which to initiate job development.

EXPAND THE SEARCH BEYOND USUAL PLACEMENT OPPORTUNITIES

Do not rely on only those employers with whom you have had previous contact. Limiting the search for job development opportunities to only those employers with whom rapport is already established--through their use of the placement service or through personal contact, for example--will unnecessarily restrain development of job opportunities.

SELL JOB DEVELOPMENT ON THE BASIS OF ADVANTAGE TO THE EMPLOYER

National programs devoted to broadening job opportunities for the disadvantaged have found that successful job development requires a skillful sales approach. By and large, employers have a profit motive. Approaching employers on the basis of demonstrating how limited skills employees can enhance productivity and profit has greater promise for acceptance than other approaches. Approaching employers on the basis of "solving staffing problems" is more likely to be successful than approaching them on the basis of "hiring the disadvantaged." The latter often results in unfilled pledges or dead-end jobs.

The Concentrated Employment Program (CEP) sponsored by the Manpower Administration (now the Employment and Training Administration) of the U. S. Department of Labor, early recognized the need for providing assistance to those engaged in developing jobs for the disadvantaged. Curriculum materials[16]

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[16] Stokes, Wood, & Associates, Inc., *Selling Job Development: Final Curriculum Materials*, prepared under Contract No. T9-8904-99 with the U. S. Department of Labor, Manpower Administration, Bureau of Work Programs, 1969. U. S. Government Printing Office: 1969 0-331-346

developed under this program to assist CEP counselors and others in developing jobs for the disadvantaged will be especially helpful to counselors and placement officers in effecting opportunities for the limited cognitive skills population.

REACH THOSE RESPONSIBLE FOR MANAGEMENT POLICY DECISIONS

Top management must provide the necessary approval for job restructuring and initiate actions which will support the development of job opportunities. The resolution to reexamine job requirements and hiring practices is a very serious action and is possible only at the top management level. Further, only top management approval can lead to development of the necessary relationship between the job counselor and the key industry personnel to build the team effort necessary for effective job restructuring. Once sanction has been given, access to those intimately knowledgeable about job requirements and activities will be essential. Suggestions to management for ways to extend the cooperative effort beyond the placement process and into the work situation will give encouragement to employees. A continued interaction will likely be essential to assure the satisfactory work adjustment of the limited skills workers and their acceptance by co-workers.

OBTAIN LABOR UNION SUPPORT

In employment situations where unions are involved, job development cannot be effected without the support and cooperation of the union. In situations where the contract between the union and management establishes job classifications, transfers, promotions, benefits, worker support systems, etc., and gives the union a role in hiring practices, union participation in initial stages of job development is absolutely essential. Unless the union becomes involved in the redefinition of job requirements and structures, the job development results may be in violation of the contract and will be rejected by the union. Even if there is no contract violation, union support will be lacking.

In situations where union participation in job development may not be so essential, it will still be necessary to keep union leadership aware of the job development activities so that union commitment to the outcome can be assured. Union leadership approval of the job development results will help to overcome union membership resistance--which may derive from workers feeling that their job stability is threatened. In any case, unions are likely to view job development actions positively when they permit upgrading and possible expansion of the work force. Union leadership involvement in this result could go a long way in overcoming resistance union members might have to job development.

IDENTIFY SITUATIONS WITH JOB DEVELOPMENT IMPLICATIONS

Job development should be initiated on a small scale and in accordance with an organization's manpower needs and problems. In order to determine what these needs and problems are, a close working relationship with persons having responsibility for job performance will be essential. Supervisors and foremen will be the persons most familiar with these aspects of the organization's operation. A management commitment to job development should include the willingness to afford the time and cost of participation of such persons.

TAKE ADVANTAGE OF COMMUNITY CHARACTERISTICS WHICH CONTRIBUTE TO JOB DEVELOPMENT POTENTIAL

In large metropolitan areas, particularly those which have heavy concentration of certain industries, areas of employment concentration will provide the greatest potential for successful expansion of job opportunities through job development. There is a threefold benefit to be gained: (a) large employers can better afford to provide technical assistance; (b) there are greater possibilities for job development where there are a variety and large number of jobs; and (c) once job development is accomplished in one situation, it can be easily adapted to other employers in the same or similar industries. It may even be possible to persuade multiple employers in a given industry to participate jointly in job restructuring or redesign.

The advantages of smaller communities and employers for job development opportunities lie in: (a) fewer management echelons, therefore fewer people to convince; (b) a greater person-to-person commitment to members of the community, including the limited skills population; and (c) a freer organization-to-organization communication.

TAKE ADVANTAGE OF SITUATIONS WHERE MANPOWER IS IN DEMAND

A manpower shortage offers a ripe situation for job development. If the manpower need is at higher skill levels, job restructuring and employment of limited skills workers could help alleviate the problem. If the manpower need is at lower skill levels, it may only be necessary to convince employers that an ample work force is available if a good match between job requirements and worker capabilities is achieved.

Even in some situations of moderate to high unemployment, lower skill jobs may remain unfilled. Very slight modification of the defined worker role may be required to: (a) make the job fit the qualifications of the limited skills employee; and (b) in an obscure way, distinguish the job from that which has been rejected by the traditional applicant so that neither the limited skills nor the traditional applicant is degraded.

LOOK FOR SITUATIONS WHERE INTUITION OR EVIDENCE INDICATES GOOD POTENTIAL FOR JOB DEVELOPMENT

Industries where there are routine and structured tasks offer good potential for job development efforts. Frequently these tasks are the responsibility of workers who are also required to handle more difficult activities. Some industries, such as laundries, food services, greenhouses, have gained wide reputation for their utilization of limited cognitive skills persons. These are traditional worker roles for this population and are not to be ignored. But, the redefinition of skill levels in automated industry offers a particularly good opportunity for developing appropriate job opportunities. Characteristics of the automated work environment which lend it so well to the limited skills population include:

- ✓ Reduced social skills requirements. In automation there is increased physical distance and often an increased noise level, both of which contribute to the reduction of social interaction opportunity.

- ✓ Closer supervision. In automated plants there is a smaller worker-supervisor ratio than in nonautomated plants, resulting in both increased rates of worker-supervisor contact and a more personal relationship.

- ✓ Limited judgment requirements. The introduction of measuring and sensing devices, fixed jigs, mechanized and electronic readouts, etc., reduces and often eliminates the judgmental aspects of the job.

- ✓ Job closeness and control. Automation requires the worker to stay close to his job and equipment. There are relatively fewer jobs where the work pace is controlled by the worker.

IDENTIFY DISCONTINUITIES BETWEEN EMPLOYMENT AND JOB REQUIREMENTS

In some instances, hiring practices are steeped in traditions which may have little or no bearing on job performance. When employment requirements are examined against job performance requirements, it is sometimes possible to identify not only levels but types of educational requirements which bear little or no relationship to job performance requirements. Inappropriate and unnecessary skills are also sometimes required of an employee. In some instances, skills are stipulated to a level beyond that which the job performance actually requires.

In working with employers to identify discontinuities between employment practices and job requirements, caution should be exercised. Such an approach should be initiated only after good rapport has been established with the employer and should always be presented in the form of positive, constructive suggestions which will benefit the employer.

IDENTIFY PROBLEMS OF OVER-QUALIFICATION, BOREDOM, ABSENTEEISM, AND TURNOVER

The practice of placing persons in jobs for which they are overqualified can lead to excess hidden costs from boredom, absenteeism, and turnover. This is probably one of the simplest bases on which to propose job development. Employers may need to be convinced that limited skills workers whose abilities properly match job requirements perform well in types of work which lead overqualified workers to perform poorly.

Job development which is undertaken as a solution to the problems of overqualification, boredom, and turnover can result in savings to the employer. Curtailment of absenteeism may require a smaller roster of workers per shift. Reduction in turnover will reduce worker training costs. These are strong selling points for job development.

USE VOLUME 2 AND THE DOT TO IDENTIFY INDUSTRIES WITH GOOD POTENTIAL FOR JOB DEVELOPMENT

Since the content of Volume 2 is restricted to jobs where only minimal cognitive skills are required, appropriate employment opportunities for the client population are easily identified within the descriptions of the occupational areas. The Volume 2 job listings and the associated job descriptions presented in the *Dictionary of Occupational Titles* (DOT) depict typical jobs within an industry. Specific jobs may differ in the local version of the industry. But, all of the jobs listed in Volume 2 have been examined by job analysts and judged appropriate to the limited cognitive skills population. Review of these and similar job descriptions will help to identify how tasks can be reassigned or modified to create different sets of jobs.

MAKE USE OF EXISTING WORK SIMPLIFICATION CAPABILITIES AND PROGRAMS

REDESIGN JOBS TO REDUCE PERFORMANCE REQUIREMENTS

Application of human engineering techniques can be useful in reducing worker qualifications requirements. Human engineering deals with such things as: the design of work stations; identification of job performance requirements; and the provision of tools, equipment, and job aids to assist the worker. Its emphasis is on adapting the work situation for optimum human performance, i.e., the design of worker tasks and the environment to fit the sensory, perceptual, mental, physical, and other attributes of people. It looks at rates of performance and rates and types of performance error to identify where the man-machine match can be improved. Through analysis of job output requirements, worker capabilities and equipment performance can be examined and reexamined to find the optimum trade-off in the person-machine combination.

REDESIGN JOBS TO TAKE ADVANTAGE OF TECHNOLOGICAL ADVANCES

The provision of additional equipment, tools, and job aids can frequently lessen the worker qualifications requirements. Job requirements are frequently modified when the provision of more efficient tools and job aids is possible through technological advances. A current example of such modification of job requirements through provision of a job aid is the relatively inexpensive, portable, and easily operated hand calculator which has reduced the level of mathematical capability required for many jobs. This is a typical, but far-reaching, example of how job performance requirements should be reexamined because of implementation of technological advances.

Similar technological advances which indicate job redesign are always occurring or are on the horizon. For example, the initiation of sense-marked grocery store item prices and price readout equipment is having a definite impact on clerking and shelf-stocking occupations in grocery stores. When technological innovations create jobs or job activities which are outside currently defined job requirements, there can be an especially advantageous situation for developing job opportunities. Not only do such situations permit an almost free hand in defining job requirements and structures, they get around the legalistic problems which may be encountered when redesign is attempted on existing jobs.

USE EXISTING SIMPLIFIED WORK STATIONS AS MODELS

Good examples of how task separation, special equipment and tools, and application of practical work flow are employed to reduce performance requirements can be found in vocational rehabilitation centers, sheltered workshops, etc. Much can be learned about work simplification procedures through observation of the work process in these settings and through discussion with those who have responsibility for the design and operation. Visits to these centers by employers who are skeptical, or at least unknowledgeable, about the limited skills person's ability to handle a job could be a very convincing demonstration.

MAKE USE OF JOB ANALYSIS TECHNIQUES FOR JOB RESTRUCTURING

Job analysis is the identification of worker activities and skills required to complete a set of associated actions or operations which make up a job. Job restructuring is the assembling of identified worker activities from one set of jobs to build a different set of jobs, for accomplishing the same product or output.

While counselors and placement officers would not choose to perform job analysis and job restructuring on a routine basis, there may be instances when prospective employers, if given adequate encouragement and assistance, may demonstrate interest in applying these techniques to provide increased employment opportunities for persons of limited cognitive skills. For those

counselors and placement officers interested in gaining in-depth understanding of job analysis, the *Handbook for Analyzing Jobs*[17] will be very useful. *A Handbook for Job Restructuring*[18] presents a sample format and instructions which could be adapted for job restructuring to create jobs for limited skills employees.

Job analysis and job restructuring can be used in two different but related ways:

- ✓ To create a new set of positions from an existing set of positions.
- ✓ To build a variety of positions where multiple workers perform the same job.[19]

Preliminary steps required and procedures which can be employed in achieving both of the above types of job restructuring are discussed in the following paragraphs.

ANALYZE CLUSTERS OF JOBS

DEFINE A CLUSTER OF RELATED JOBS

Work situations where there are sets of related jobs with a variety of task activities at varying levels of difficulty will be those with greatest potential for job restructuring. Large establishments are more likely to afford such opportunities than small. Manufacturing industries offer good potential since there is usually a sequence of proceduralized operation. Business occupations also have good potential for job restructuring since they require a variety of tasks at different levels of difficulty. Useful sources for identifying job clusters are:

- ✓ Organizational job descriptions. Large organizations in particular are likely to have detailed job descriptions which identify worker responsibilities in terms of performance requirements, task activities, tools and equipment used, and knowledge requirements. These descriptions will be especially useful since they represent the tasks which the particular organization associates with the job.

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[17] United States Department of Labor, Manpower Administration. *Handbook for analyzing jobs.* Washington, D. C.: U. S. Government Printing Office (Stock No. 2900-0131), 1972.

[18] United States Department of Labor, Manpower Administration. *A handbook for job restructuring.* Washington, D. C.: U. S. Government Printing Office (GPO#1970-0-374-085), 1970.

[19] As defined in the *Handbook for analyzing jobs*, a position is a collection of tasks constituting the total work assignment of a single worker. There are as many positions as there are workers. A job is a group of positions which are identical with respect to their major or significant tasks. There may be one or many persons employed in the same job.

✓ Job knowledgeable people. Queries to supervisors and foremen can be used either to enhance the job description information or to obtain it in the absence of a prepared job description. In addition, supervisors and foremen will be able to provide information about job interactions and interfaces--information which will be very useful in job restructuring.

✓ Volume 2 of the handbook and Volume I of the DOT. Reference to the occupational listings in Volume 2 will identify sets of jobs with potential for job restructuring. This information can be amplified by reference to the job descriptions in Volume I of the DOT. In addition, Volume I of the DOT will allow the identification of jobs which are outside the limits of those identified in Volume 2 of the handbook. In some instances, it may be appropriate to extend the job cluster to those jobs which exceed the limited cognitive skills levels.

IDENTIFY APPROPRIATE JOB ANALYSIS INFORMATION REQUIREMENTS

A sophisticated approach to job analysis is not essential. As a minimum, identification of tasks included, level of difficulty, and time involved are required. Identification of special knowledges, worker capabilities, tools and equipment used, and worker interactions may be appropriate. Identification of task requirements can best be performed by the employer representative, with the counselor's help. The primary function of the counselor or placement officer is to help the employer representative understand the types of responsibilities and roles the limited skills population can handle.

RESTRUCTURE NEW POSITIONS FROM EXISTING POSITIONS

Jobs for limited skills persons can be restructured from a set of positions--each of which carries a different set of requirements. This type of job restructuring requires breaking apart the limited skills tasks from a group of existing positions to create at least one new position which makes no demands beyond the capabilities of the limited skills worker. As a consequence, new positions consisting of tasks with higher skill requirements will also be created. Job restructuring of this type is demonstrated schematically in Figure 7.

IDENTIFY TASK ACTIVITIES

At Step 1, the task types and levels of task difficulty, as they presently exist, are identified for each of three positions (Positions number 1, 2, and 3). Each position has eight hours of activity--each block representing one hour of activity. The amount of time devoted to each of three tasks (Tasks A, B, and C) by each position is also determined. The three positions share the three different task types at three different task difficulty levels (LOW, MEDIUM, and HIGH).

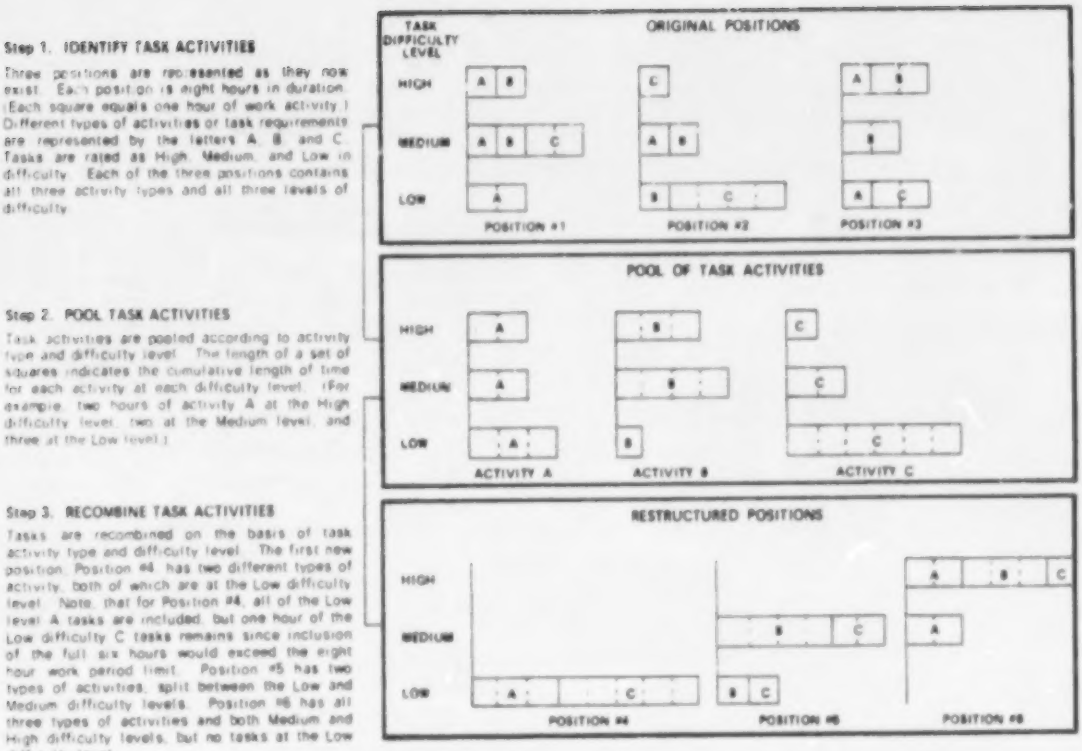
Step 1. IDENTIFY TASK ACTIVITIES
Three positions are represented as they now exist. Each position is eight hours in duration. (Each square equals one hour of work activity.) Different types of activities or task requirements are represented by the letters A, B, and C. Tasks are rated as High, Medium, and Low in difficulty. Each of the three positions contains all three activity types and all three levels of difficulty.
Step 2. POOL TASK ACTIVITIES
Task activities are pooled according to activity type and difficulty level. The length of a set of squares indicates the cumulative length of time for each activity at each difficulty level. (For example, two hours of activity A at the High difficulty level, two at the Medium level, and three at the Low level.)
Step 3. RECOMBINE TASK ACTIVITIES
Tasks are recombined on the basis of task activity type and difficulty level. The first new position, Position #4, has two different types of activity, both of which are at the Low difficulty level. Note, that for Position #4, all of the Low level A tasks are included, but one hour of the Low difficulty C tasks remains since inclusion of the full six hours would exceed the eight hour work period limit. Position #5 has two types of activities, split between the Low and Medium difficulty levels. Position #6 has all three types of activities and both Medium and High difficulty levels, but no tasks at the Low difficulty level.
TASK DIFFICULTY LEVEL
ORIGINAL POSITIONS
HIGH
MEDIUM
LOW
POSITION #1
POSITION #2
POSITION #3
POOL OF TASK ACTIVITIES
ACTIVITY A
ACTIVITY B
ACTIVITY C
RESTRUCTURED POSITIONS
POSITION #4
POSITION #5
POSITION #6

Figure 7. Demonstration of Job Restructuring When Multiple Positions are Involved

POOL TASK ACTIVITIES

At Step 2, the task activities are pooled by type, difficulty level, and time required. In this example the seven hours of Task "A" activities are rather evenly distributed across difficulty level (three hours of LOW difficulty level, two hours of MEDIUM difficulty level, and two hours of HIGH difficulty level). In contrast, Task "C" activities are most often of LOW difficulty level (six hours of LOW difficulty level, two hours of MEDIUM difficulty level, and one hour of HIGH difficulty level).

RECOMBINE TASK ACTIVITIES

At Step 3, the tasks are recombined by activity type and difficulty level. The eight hour limit of task activity per position is retained. The new "Position number 4" is restricted to LOW difficulty tasks of two types (Activities A and C). This would be a job that a limited skills client could handle. In contrast, the new "Position number 6" requires all three types of activity (A, B, and C) and a worker of much higher skill since the majority of requirements are at the HIGH difficulty level. The new "Position number 5" comes out primarily as a MEDIUM difficulty level position, with six hours of MEDIUM difficulty level activity and two hours of LOW difficulty level activity within two activity types (B and C).

RESTRUCTURE NEW POSITIONS FROM AN EXISTING JOB

Jobs for limited skills persons can also be restructured from a set of jobs, each of which carries the same set of requirements. This type of job restructuring creates new positions for limited skills workers by breaking off sets of comparable low difficulty tasks. As a consequence, new positions consisting of tasks with higher skill requirements will also be created.

The same set of Step activities (Steps 1, 2, and 3) employed in building new positions from existing positions (as shown in Figure 7) is employed in this type of job restructuring. Job restructuring to build new positions from an existing set of jobs is shown schematically in Figure 8.

IDENTIFY TASK ACTIVITIES

At Step 1, there are four positions, each of which has the exact same set of task requirements, covering eight hours of activity. Each position has five types of task activity (A, B, C, D, and E) at three difficulty levels (LOW, MEDIUM, and HIGH).

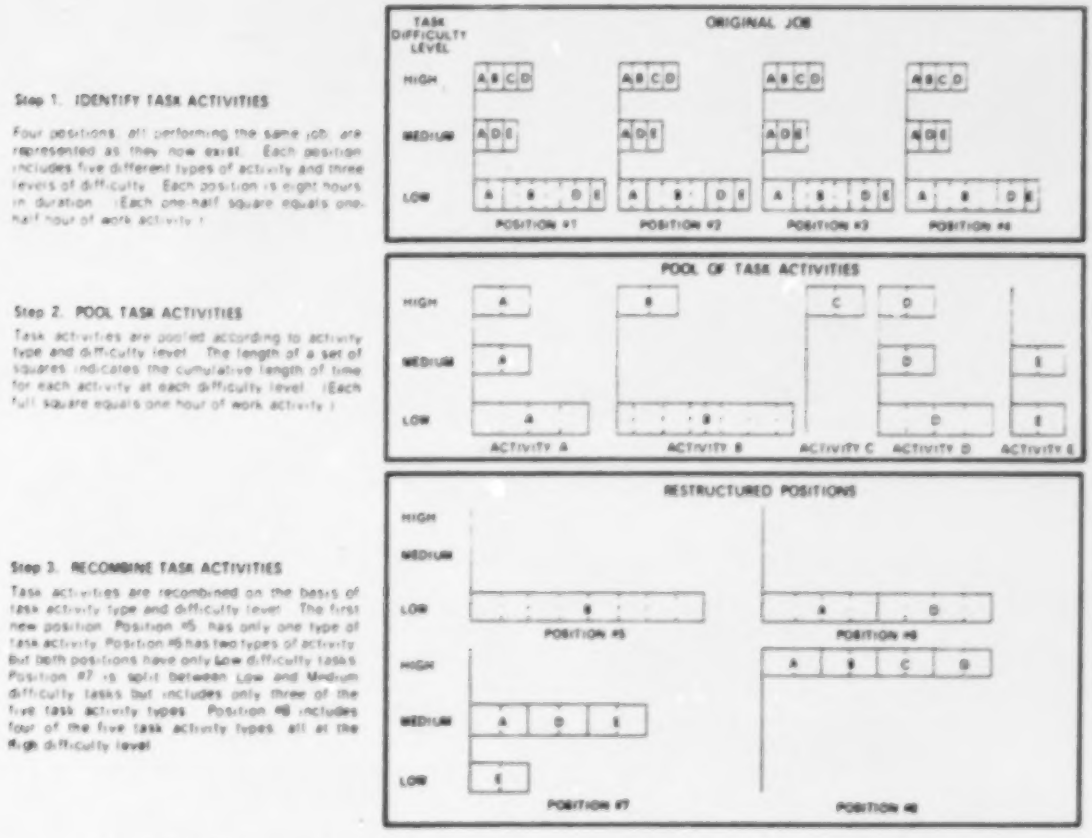
Step 1. IDENTIFY TASK ACTIVITIES
Four positions, all performing the same job, are represented as they now exist. Each position includes five different types of activity and three levels of difficulty. Each position is eight hours in duration. (Each one-half square equals one-half hour of work activity.)
Step 2. POOL TASK ACTIVITIES
Task activities are pooled according to activity type and difficulty level. The length of a set of squares indicates the cumulative length of time for each activity at each difficulty level. (Each full square equals one hour of work activity.)
Step 3. RECOMBINE TASK ACTIVITIES
Task activities are recombined on the basis of task activity type and difficulty level. The first new position, Position #5, has only one type of task activity. Position #6 has two types of activity. But both positions have only Low difficulty tasks. Position #7 is split between Low and Medium difficulty tasks but includes only three of the five task activity types. Position #8 includes four of the five task activity types, all at the High difficulty level.
TASK DIFFICULTY LEVEL
ORIGINAL JOB
HIGH
MEDIUM
LOW
POSITION #1
POSITION #2
POSITION #3
POSITION #4
POOL OF TASK ACTIVITIES
ACTIVITY A
ACTIVITY B
ACTIVITY C
ACTIVITY D
ACTIVITY E
RESTRUCTURED POSITIONS
POSITION #5
POSITION #6
POSITION #7
POSITION #8

Figure 8. Demonstration of Job Restructuring When Multiple Jobs are Involved

POOL TASK ACTIVITIES

At Step 2, the task activities are pooled by type, difficulty level, and time required. For example, for Task "A" activities, there are four hours of LOW difficulty level activity, two hours of MEDIUM difficulty level activity, and two hours of HIGH difficulty activity. For Task "C" activities there are only two hours of HIGH difficulty level activity.

RECOMBINE TASK ACTIVITIES

At Step 3, the tasks are recombined by activity type and difficulty level to create four new positions (Positions number 5, 6, 7, and 8). Two different positions requiring only limited skills are created: new "Position number 5" involves only one type of task activity (type B) at the LOW difficulty level; new "Position number 6" requires two types of activity (A and D) at only the LOW difficulty level. As with the example in Figure 7, higher level positions are created: new "Position number 7" includes primarily MEDIUM difficulty tasks of three types (A, D, and E); new "Position number 8" includes only HIGH difficulty tasks of four task types (A, B, C, and D).

DEFINE JOB REQUIREMENTS

Whether job development occurs through redesign or restructuring of jobs, work simplification, human engineering, or implementation of results of technological advances, the resultant job(s) will impose different responsibilities on workers and create a different mix of supervision, training, and other types of job support.

If employers are willing to develop job opportunities for persons of limited cognitive skills, counselors and placement officers will want to be supportive of these efforts, at least to the extent of providing guidance in the identification of new requirements and responsibilities. The following paragraphs are intended to assist counselors and placement officers in providing this guidance to employers.

IDENTIFY THE NEW JOB PERFORMANCE REQUIREMENTS

A set of job descriptions, at some level, should result from the job development process. At what level the new description is prepared depends upon: (a) the extent of variation from the initiating job(s), and (b) the level at which the source description was prepared. New jobs in informal and loosely structured job environments will probably not need to be supported by a detailed job description. New jobs in highly structured settings will likely require a detailed job description. In either instance, a new job description which reassembles the original job description information at its former level will probably be adequate.

IDENTIFY SUPERVISORY, TEAM, WORK GROUP, AND SPECIALIZATION CAPABILITIES

Explicit or implicit in the descriptions for the jobs resulting from job development may be differences in:

- ✓ Allocation of supervisory responsibilities. The limited skills employee is likely, particularly initially, to require more supervision than the traditional employee. More experienced employees are good candidates to perform this supervisory role, particularly if the limited skills workers' functions are those previously included in the traditional employees' functions. If longer tenure employees assume a new supervisory role, they may need guidance in how to carry this out.

- ✓ Team and work group assignment. By separating low difficulty tasks from higher level tasks, or by implementing work simplification procedures, a modified team effort may be required for job completion. The sequential, "assembly-line" type results of these efforts may or may not be apparent to the workers involved. But, it is essential that this aspect of job performance be taken into account by those in charge.

- ✓ Specialization capabilities. Job development may create the need for specialists, that is, persons who have specific attributes--knowledge or performance capabilities--which are essential to job completion. Specialization is not necessarily restricted to higher skill levels. There will be limited skills employees who, because of their particular abilities or work assignment, become "specialists of the trade." The key to making appropriate use of specialist capabilities is to achieve a good match between the worker capabilities and the job requirements.

DIFFERENTIATE LEARNING FROM PERFORMANCE FACTORS

Learning to do a job may require a different set of behaviors from actually performing the job. The types of aids which support job learning differ from those which support job performance. Learning aids support the commitment to memory of information, an action, or a series of actions required for job performance. Step-by-step instructions and demonstrations of required performance are typical examples of unsophisticated learning aids which are particularly appropriate for limited cognitive skills jobs.

Performance aids support the requirements of a given job. Measurement guides and marked scales are typical examples of job-specific performance aids for limited cognitive skills jobs. Performance aids can substitute for knowledge and discrimination requirements, and can, thereby, reduce job performance requirements to a level appropriate to the limited cognitive skills employee.

Some jobs, or aspects of jobs, can best be supported by learning and/or learning aids, some by the provision of performance aids. Some jobs may require both. For most limited cognitive skills jobs, review of job requirements and common sense will dictate whether a learning aid, performance aid, or both will be required. In many instances, the provision of a simple performance aid plus demonstration will adequately qualify the worker for job performance, especially for substantially structured task situations.

FOLLOW UP ON NEWLY DEFINED JOBS

There are two aspects to following up on jobs which result from job development efforts: (a) to assure the work adjustment of the limited skills employee, and (b) to extend the range of job opportunities.

SUPPORT THE CLIENT AND THE EMPLOYER THROUGH THE JOB ADJUSTMENT PERIOD

Counseling of the limited skills employee in the new job is but one aspect of the job adjustment period which will follow placement. The employer who has participated in opening up job opportunities for the client group may have, as a result, a slightly different job structure and the responsibility for integrating the new employee into the work force. Counselors and placement officers may need to assist employers and co-workers through the period of adjustment. These services are critical not just to the immediate situation to assure that the employer will retain the present limited skills employees but will also expand opportunities for their employment in the future. Employers will likely view their employment of the limited skills worker as a "tryout." Counselors and placement officers, by supporting both clients and employers through the early employment stages, can turn the "tryout" into an effective demonstration of good employment practices.

EXTEND JOB DEVELOPMENT EFFORTS TO CREATE ADDITIONAL JOB OPPORTUNITIES

The lessons learned in the process of job development and employment of limited skills clients should facilitate this activity in further expansion of job opportunities. Two particularly useful ways to apply the job development experience are: (a) to extend the job to additional jobs within the present employment setting, and (b) to use the effort as a demonstration to other employers that the opening up of jobs to limited skills workers is both workable and practical. The assistance of the limited skills workers as well as the employer should be sought in this demonstration.

Chapter 5

MATCH CLIENT AND JOB OPPORTUNITIES

Chapter 5

MATCH CLIENT AND JOB OPPORTUNITIES

OVERVIEW

This chapter presents a general discussion of the principal information and processes required in effecting an optimum job placement for the limited cognitive skills client. The activities required are shown schematically in Figure 9.

DEFINE APPROPRIATE CLIENT JOB DOMAIN
IDENTIFY AND CONTACT EMPLOYERS
FOLLOW UP WITH EMPLOYER
COMPARE CLIENT AND JOB PROFILES
DEFINE AND SELECT SPECIFIC OPPORTUNITIES
COMPLETE THE PLACEMENT
REVIEW SPECIFIC JOB AVAILABILITY DATA
COUNSEL WITH AND PREPARE CLIENTS
FOLLOW UP WITH CLIENT

Figure 9. Principal Activities in Matching Clients and Jobs

The discussion of these activities which follows demonstrates how the two volumes of this handbook can be used jointly to effect job placement for limited skills clients. However, the discussion is intended to be general enough so that any sources of client and job opportunities information can be explored to effect placement of the client.

DEFINE APPROPRIATE CLIENT JOB DOMAINS

REVIEW THE CLIENT CAPABILITIES SUMMARY

Through completion of the client assessment, counselors and placement officers should have adequate information on which to judge the client's capabilities and should also have some indication of client job interests. If, in the course of interviewing the client to obtain the capabilities information there have not been indications from the client where job interests lie, further discussion with the client is appropriate. Past work experience, schooling, and other training will also provide clues to the identification of client job interests. This information may indicate what types of work and work situations the client prefers, as well as those which do not appeal.

ATTEND TO CAREER IMPLICATIONS

Limited cognitive skills clients should not be treated differently than other types of clients with respect to career aspirations and intentions. It may be a novel request to the client to be asked to think in these terms, and the counselor and placement officer may need to aid the client in seeing and selecting future job aspirations.

The descriptions of occupational areas, especially the discussion on career opportunities in Volume 2, provide assistance in making potential opportunities known to the client. Counselors and placement officers will need to exercise caution in this discussion with the client so as not to present a setting of wide-open career aspirations which could not be achieved. Careful attention to the client's limitations as well as capabilities, and particularly to the assessment of the client's potential through training, will be necessary.

SELECT A VARIETY OF OCCUPATIONAL AREAS WITH GOOD POTENTIAL

Limited cognitive skills clients will have potential for fitting into a variety of occupations. Communities, large and small, offer a variety of situations with potential for placement. A realistic identification of job opportunities will include a variety of occupations. The local employment situation will, of course, temper the identification of potential occupations.

REVIEW SPECIFIC JOB AVAILABILITY

SEARCH JOB FILES FOR RELEVANT OPPORTUNITIES

Job files which have been prepared so as to identify employment opportunities suited to the limited skills client, as suggested in Chapter 3, will facilitate the identification of realistic opportunities. The client's indications of interest will act as a further selection factor, delimiting the types of opportunities of interest out of those which are available.

MAKE USE OF JOB DEVELOPMENT EFFORTS TO IDENTIFY FURTHER OPPORTUNITIES

Where counselors and placement officers have been effective in gaining employers' cooperation in opening up job opportunities for limited cognitive skills clients, opportunities for placement will be good. This situation cannot be treated as an open door to just any client, however. Opportunities available through job development efforts should be just as carefully screened to a client's abilities and interests as any other job opportunity. If job development efforts result in a mismatch of client and job, there will be impediments to future employment of limited cognitive skills clients.

COMPARE CLIENT AND JOB PROFILES

BE SENSITIVE TO CLIENT CAPABILITY DATA

The Client Capabilities Summary presents a rich profile of the client which is further enhanced by the evaluation of training effects, particularly as this indicates future job possibilities. If the full client potential is to be realized, counselors and placement officers will need to attend to both the client's immediate and long-range potential. They will also need to attend to negative aspects of the Client Capabilities Summary, that is, those personality or physical characteristics which tend to eliminate rather than identify job opportunities.

BE SENSITIVE TO REAL JOB REQUIREMENTS

Counselors and placement officers have strategies for and are well practiced at matching clients and jobs. Those who have read or referenced other portions of this handbook will have developed an awareness of the potential limited cognitive skills clients have for a great variety of job opportunities. Volume 2 permits easy comparison of clients and jobs when job openings are identified by a *Dictionary of Occupational Titles* (DOT)

number and the Client Capabilities Summary is prepared. In instances where the DOT numbers are not available for job openings, the counselor or placement officer can probably identify the appropriate occupational title by searching through the list of titles within the occupational group, especially if reference is made to the job description information presented in Volume I of the DOT.

COMPARE CLIENT CAPABILITIES AND JOB REQUIREMENTS DATA

The key issue in comparing client and job profiles is to assess the real requirements of the job against the indicated client capabilities. The closer the interpretation of job requirements is to the client capabilities data, the better the client-job match can be. The Client Capabilities Summary has been structured to facilitate this comparison by making it compatible with the job requirements data presented in Volume 2.

Once an indication of interest in a particular type of work is given by the client, the counselor or placement officer can search the appropriate occupational area for job listings which are within the capabilities of the client. If, for example, the client indicates interest in printing occupations, the counselor would search the job listings in this area in Volume 2 (DOT Codes 650.-659.) and see what types of jobs match the client capabilities. There are over 100 job listings in the printing occupation, about half of which make no significant cognitive demands on the worker. Thus, even a client with only Minimal language, mathematics, and perceptual processing capabilities could handle a large number of jobs in the printing trade.

The client capabilities data can also be used to determine the suitability of the client-job match on other parameters. For example, about 20 percent of the printing occupation jobs indicate a noise or vibration condition (Working Condition = 5). Clients who demonstrate aversion or sensivity to noise or vibration should not be considered for those particular jobs.

In making the client-job match, counselors and placement officers should first be particularly sensitive to the cognitive and training requirements parameters. Secondly, they should use other parameters to assure compatibility between the client capabilities and the job requirements. It is not essential that clients and jobs be compared on each and every parameter presented in the Client Capabilities Summary and in the job listings in Volume 2. But, client success on the job will have increased potential with each additional capability-requirements match.[20]

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[20] See the Introduction to Volume 2 for full explanation of all of the notations employed in the Volume 2 job listings.

DEFINE AND SELECT SPECIFIC OPPORTUNITIES

MAKE PRIORITY ORDER SELECTIONS

Work with the client to make final selection of the job opportunities to be investigated. Attend to the client's abilities to perform the job, interest in the job and its career potential, and aspects of the client's life-situation and general employability parameters as these relate to a specific job opportunity. Ordering of specific opportunities in this fashion will tend to reduce the number of times the client will be exposed to the employment seeking situation.

ASSURE CLIENT ACCEPTABILITY BY POTENTIAL EMPLOYERS

If prior agreement has been reached with employers about acceptance of the limited skills client, no further action may be required. If prior agreement has not been obtained, guidance provided in Chapter 3 will be helpful in assuring the client's acceptability.

IDENTIFY AND CONTACT EMPLOYERS

SELECT SPECIFIC EMPLOYERS TO BE CONTACTED

Within a geographic area, there may be multiple employers identified within an identified employment opportunity selection. Select those employers with the greatest potential for hiring the limited cognitive skills client. Employers who have indicated interest in making job opportunities available to limited skills persons would, obviously, be those with the greatest potential for hiring them. Other employers may indicate a sensitivity to the problem, and they too would be high on the selection list. Where one employer in an industry has successfully employed limited skills persons, these situations can be used as demonstrations to other employers in that industry. Selecting employers with greatest potential for hiring the limited cognitive skills client further reduces the extent of exposure the client has to the employment interview situation.

ARRANGE CLIENT INTERVIEW

Limited cognitive skills clients may or may not be able to handle making the employment interview arrangements. In any event, counselors and placement officers usually make these arrangements even for other than limited skills clients. When interview arrangements are complete, make sure the client is aware of the arrangements and can either arrive for the interview independently or has made arrangements for assistance.

COUNSEL WITH AND PREPARE CLIENTS

The employment interview is likely to be more difficult for the limited cognitive skills client then meeting the job requirements once hired. Counselors and placement officers will need to assure that the client can handle the employment interview. It may even be necessary for the counselor or placement officer to coach clients as to how to conduct themselves through the interview. Role playing has been found particularly useful in helping disadvantaged clients achieve a comfortable interview role. If employers are likely to test the client, practice in similar test situations will be helpful in overcoming the client's test shyness.

COMPLETE THE PLACEMENT

When placement has been confirmed by the employer, the client may be requested to complete many employment forms. Some limited cognitive skills clients may not be able independently to handle the detailed paper work involved. Employers are often willing to allow the newly hired employee to complete employment forms away from the place of employment. Counselors and placement officers can enhance the client's employability by making potential employers aware that they will assist the client in this aspect of the employment process.

FOLLOW UP WITH THE EMPLOYER

CHECK THE CLIENT'S WORK PROGRESS

Particularly at early stages of employment, counselors and placement officers will want to assure themselves of the client's adjustment to and progress in the job. A free communication should be established with the employer so that there is optimum opportunity for resolving any adjustment difficulties on the part of the client, co-workers, or supervisors. These aspects of the counseling function will be particularly important with employers who have not had much experience in handling limited cognitive skills workers.

TAKE ADVANTAGE OF SUCCESSFUL PLACEMENTS TO EXTEND OPPORTUNITIES TO OTHER CLIENTS

Once employers have found that persons with limited cognitive skills make good employees, they will be easily encouraged to employ additional such workers. But, the greatest advantage of a successful placement situation may be in the demonstration it can afford to other employers.

FOLLOW UP WITH CLIENTS

CONTINUE CLIENT GUIDANCE

Placement of limited cognitive skills clients may impose requirements for counselor and placement officer assistance beyond work adjustment. These needs may relate to living arrangements, arrangements for getting to work, assisting the client in handling money and budgets, etc. Counselors and placement officers will recognize these needs better than the client and should provide assistance directly or guidance as to other sources of services available to the client.

PROVIDE CLIENT ASSISTANCE ONLY TO THE EXTENT NECESSARY

One of the major objectives in expanding the range of jobs available to limited cognitive skills clients is to increase their self-sufficiency. Counselors and placement officers should place themselves at the disposal of their clients, but not create a dependency situation.

Limited cognitive skills clients will be no different than other clients in seeking and rejecting assistance. It is up to the counselor or placement officer to be sensitive enough to the client to discern when assistance is needed, when it is asked and not needed, when the client needs but cannot ask, and when the client has the personal resources to handle a given situation. Above all, it is important to recognize that they are people, just as all others, and that they too have different levels of capability for different kinds of activities and responsibilities.

APPENDIX

APPENDIX

GUIDANCE TO MANAGERS IN ASSESSING COUNSELING AND PLACEMENT PERFORMANCE

OVERVIEW

Managers of organizations or institutions providing counseling and placement services to the limited cognitive skills population may be interested in determining the type and extent of the effect of such services. Figure 10 identifies the principal activities in assessing counseling and placement performance. Suggestions for carrying out each of these aspects of assessment are provided in the paragraphs which follow.

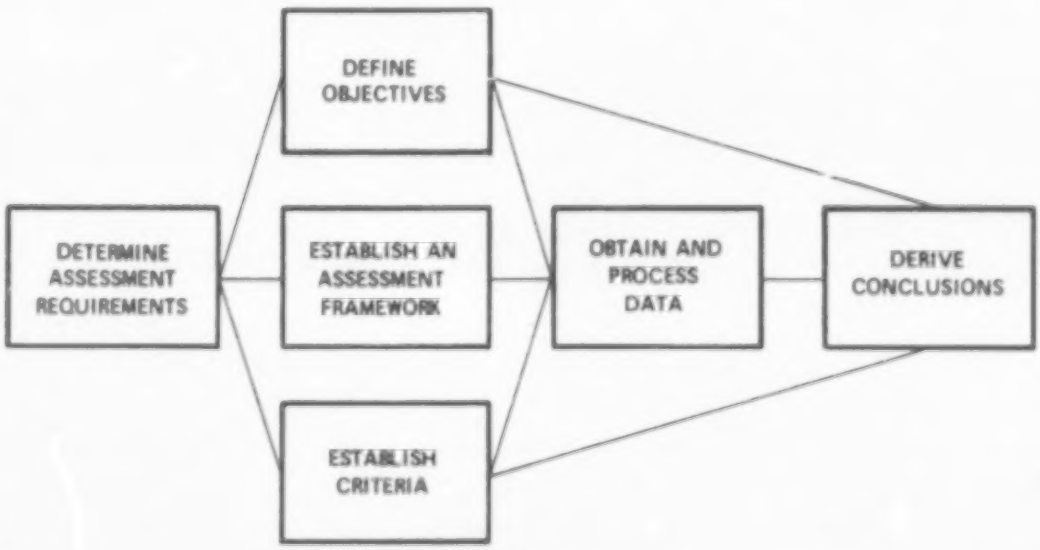

Figure 10. Principal Activities in Assessing Counseling and Placement Performance

Managers may want to engage the assistance of applied behavioral and social scientists in planning, conducting, and interpreting assessment activities. Frequently, there are persons associated with local universities and colleges who welcome the opportunity to assist in such activities since they provide a vehicle for preparing master's or doctoral theses and the opportunity for professional publication.

DETERMINE ASSESSMENT REQUIREMENTS

DETERMINE REASONS FOR ASSESSING THE PLACEMENT PROCESS

There are many reasons for examining the results of the placement process. Some of the most important ones are:

- ✓ It can be an imposed requirement.
- ✓ It can be a demonstration of effectiveness.
- ✓ It can be a comparison of placements under different strategies and conditions.
- ✓ It can provide useful guidance for improving the placement process.

Any of the above is a justifiable reason for undertaking assessment, but the last of the set has the greatest potential pay-off for the effort. While the other purposes are served within the guidance provided here, emphasis is on helping management to determine the strengths and weaknesses of the process for the ultimate improvement of counseling and placement services.

DETERMINE WHETHER FORMAL OR INFORMAL ASSESSMENT IS TO BE UNDERTAKEN

The term assessment is used, rather than the more familiar term evaluation, because evaluation is frequently restricted to a rigidly controlled measurement situation. Assessment is intended to include both the rigidly controlled formal measurement situation, as well as a less formal examination of counseling and placement activities and results.

Whether or not a formal assessment is undertaken depends upon several factors:

- ✓ Are resources available?
- ✓ Is there competency to conduct such a test?
- ✓ Would information gained impact significantly on the counseling and placement process?

A positive response to each of the above questions indicates a strong position for conducting a formal evaluation. Even if there is a negative response to each of the above questions, however, it is likely that some informal type of review will occur. The guidance given here is appropriate to informal as well as formal assessment.

The stage of program development can impact on selection of the appropriate type of assessment. During formative stages of a program, evaluative judgments which are based on relatively uncontrolled observations may provide acceptable evidence for modification of plans and procedures. Once procedures have been formally established, however, evaluative data will probably need to be much more rigorously controlled to justify substantive change--especially if the change involves significant costs.

DEVELOP AN ASSESSMENT PLAN

Whatever the level and type of assessment undertaken, there are given activities which are included either directly or indirectly, consciously or unconsciously. These activities are those depicted in Figure 10. They should be governed by an assessment plan. How detailed and formal this plan becomes depends upon the intended scope of the assessment. At the very minimum, the plan should address the areas of: objectives, data needs, schedule, and personnel responsibilities. A more detailed plan would attend to the following types of information:

- ✓ Definition of the specific purposes of the assessment.
- ✓ Identification of the resources available, such as the amount of money and personnel who could participate.
- ✓ Definition of the specific objectives the assessment should seek to attain and the results expected.
- ✓ Assurance that the stated objectives are attainable within the resources available.
- ✓ Selection of the study design to be used, or the way in which the assessment objectives will be met--including definition of the type and size of sample to be used.
- ✓ Determination of what kinds and how many people will participate, and whether the effort can be completed wholly by the counseling and placement service, or whether outside assistance should be sought.
- ✓ Identification of the kinds and amount of special training which might be required to conduct the assessment.
- ✓ Identification of what, when, and how much data are to be collected.
- ✓ Identification of methods for processing and analyzing the data.
- ✓ Identification of any supplemental information which might be needed to assure appropriate interpretation of the assessment results.

- ✓ Determination of what results will be acceptable evidence that the assessment objectives have been achieved.
- ✓ Determination of the kind of assessment report required, its dissemination, and use of the assessment results.

DEFINE OBJECTIVES

Counseling and placement objectives describe the conditions which are expected to result from these activities. Assessment objectives describe how it will be demonstrated that the desired conditions have or have not been achieved. Thus, assessment objectives are directly tied to the counseling and placement objectives.

STATE COUNSELING AND PLACEMENT OBJECTIVES

Structuring an assessment effort best begins with the definition of the essential purposes of the counseling and placement process. It is usually useful, however, to state subobjectives which support the major objectives, as shown in Figure 11. The hierarchical nature of objectives facilitates this step. The essential need is to define the most important intentions in simple terms.

TRANSLATE COUNSELING AND PLACEMENT OBJECTIVES INTO ASSESSMENT OBJECTIVES

Each counseling and placement objective requires translation into terms suitable to focus the assessment effort. An example of such a translation of counseling and placement objectives is presented in Figure 11.

ESTABLISH AN ASSESSMENT FRAMEWORK

An assessment framework must be developed through which individual case data can be expanded into a structured data set which is responsive to the assessment objectives. There are practical considerations of purpose, resources and constraints, responsibility, and emphases or priorities. There are theoretical considerations of assessment design, data and measures, and adequacy of the data to meet assessment intention.

MAINTAIN A FOCUS ON THE PURPOSE OF ASSESSMENT

Assessment has a limited purpose: To support judgments concerning the expected and achieved outcomes of the counseling and placement process. The assessment output should have practical implications for understanding and improving the counseling and placement process.

MAJOR COUNSELING AND PLACEMENT OBJECTIVE: To improve the overall placement of clients with limited cognitive skills.	**MAJOR ASSESSMENT OBJECTIVE:** To demonstrate the improved overall placement of clients with limited cognitive skills.
SUBOBJECTIVES	**SUBOBJECTIVES**
To improve the occupational status of clients.	Test whether completed placements offer clients improved job status and opportunity than previously available.
Expand the number of placements.	Test whether a greater number of clients are placed than previously.
Take appropriate account of occupational opportunities.	Test whether or not client employment status change is associated with particular occupations. Estimate the nature and extent of the association.
Make an appropriate investment in client services.	Test whether or not the type of service given is associated with client employment status change. Estimate the nature and extent of the association.
Make an appropriate investment in employer services.	Test whether or not the type of service given is associated with employment opportunity change. Estimate the nature and extent of the association.
Take appropriate account of client characteristics.	Test whether or not the client characteristics are associated with employment status change. Estimate the nature and extent of the association.
Take appropriate account of training opportunities.	Test whether or not training is associated with client employment status change. Estimate the nature and extent of the association.

Figure 11. Sample Counseling and Placement Objectives with Related Assessment Objectives

EXAMINE RESOURCES AND CONSTRAINTS

Objectives are achieved only through the application of resources. Where resources are absent, a constraint is automatically imposed. It is important that resources and constraints be considered in an organized fashion in planning and implementing the assessment. There are four general categories of resources which should usually be considered:

- ✓ Time. Time, as a resource, can be considered in terms of money. But, in the counseling and placement situation this may be shortsighted. If counselors and placement officers become involved in assessment activities, time for these activities must be made out of time otherwise spent in counseling and placement activities. Expenditure of counselor and placement officer time for assessment should be examined with a view toward: (a) making use of regularly collected information rather than data which are unique to assessment, and (b) judicious balance of time between the regular aspects of the counseling and placement activities and the assessment activities. If assessment results contribute to increased efficiency in counseling and placement services, at least part of the assessment time is counter-balanced.

- ✓ Money. Money is time, but also the purchase of many other aspects of the counseling and placement service and the assessment activities. As with time, increased efficiency and effectiveness resulting from the assessment can discount the actual cost of assessment.

- ✓ Facilities and services. Facilities and services for conducting an assessment may well be beyond those available within the counseling and placement services, not only in amount but in type. It may be well to look outside not only for the purchase of necessary facilities and services (e.g., data processing and interpretation), but for contribution of services. Enlisting the support of students and faculty of local colleges and universities, for example, could greatly expand the facilities resources, but would also be self-serving to these institutions' own interests in providing practical social service activities.

- ✓ Personnel and knowledge. Availability of these resources is much akin to the availability of facilities and services resources. Expansion of personnel and knowledge resources should be explored in much the same fashion as for the expansion of facilities and services resources.

ESTABLISH EMPHASES AND PRIORITIES

Not all objectives are equal in importance; usually, there will not be adequate resources to investigate all objectives. Emphases are determined by the need for information to support operational decisions. The allocation of resources for assessment must be established and operated on a set of priorities. Greatest priority should be given to aspects of assessment with the greatest potential for affecting operational decisions, and where greatest confidence can be placed in the anticipated assessment results.

DETERMINE ASSESSMENT RESPONSIBILITIES

One of the major outcomes of the examination of resources and constraints and the setting of priorities, should be the delineation of assessment responsibilities, at least at some general level. As plans become more fixed, responsibilities must become more fixed--ultimately to the level of assignment of all functions to a set of individuals.

DETERMINE THE ASSESSMENT STUDY DESIGN

The assessment study design attends to the organization of measures in ways to permit demonstration of achievement or nonachievement of the intended effects of the counseling and placement services. Decisions about the study design will determine how much confidence can be placed in the results of the assessment. One primary purpose of the study design is to focus attention of the assessment on effects which result from factors associated with the counseling and placement process, as opposed to results from other extraneous factors.

Key decisions to be made in establishing the study design relate to:

✓ Use of a case study or an experimental study. A case study involves only one group which receives the counseling and placement services. An experimental study involves two groups, one of which receives the counseling and placement services and one which does not, or one in which one group receives one type of services while the other group receives a different type of services. Thus, an experimental study involves comparison of two (or more) groups of similar individuals. An experimental study is usually safer--but more difficult--than a case study since it is usually risky to attribute observed effects to the counseling and placement services being examined in the absence of data for comparison.

✓ Assignment to groups. Groups can be formed on the basis of intact groups, e.g., all those receiving the specified services, or on a random basis, i.e., selection of a group--from some larger population--on the basis of chance. Intact groups may be preselective and thereby not representative of the population they purport to represent. Random selection of groups permits interpretation of results to that larger population.

- ✓ Measurement times. If measures are taken both before and after the particular counseling and placement services to be examined have been initiated, there is increased potential for distinguishing the effects of the services from other extraneous factors which also may have affected the occupational status of clients. Repeated measures of the counseling and placement performance can be used to determine the stability of the results.

The above conditions all make a strong argument for use of an experimental study. However, case studies can yield useful data under certain circumstances. This is especially so when the situation is such that the assessment is undertaken to:

- ✓ Merely verify that well-defined immediate goals are being achieved.

- ✓ Provide a description of postcounseling/placement status, without an attempt to attribute this status to particular aspects of the counseling/placement process.

BE AWARE OF FACTORS WHICH DIMINISH DESIGN RIGOR

For an assessment to be optimally effective, there should be as much rigor in the study design as possible. This is difficult in any ongoing activity. On the other hand, an operational situation cannot be approached inflexibly--there must always be some accommodation between assessment and operation. Essentially, it should be assessment that accommodates to operations, rather than the other way around.

In determining the assessment study design, the following factors, which tend to exclude rigor, should be taken into account:

- ✓ It may be difficult or even impossible to establish an outside control group. Counselors and placement officers usually come in contact only with clients and have no access to other populations from which to form a control group. Nor are counselors and placement officers in a position to randomly deny or modify services to clients. Both of these conditions reduce the possibility of forming a control group.

- ✓ As assessment information becomes available, it is likely to be used to improve the counseling and placement services. Deliberate efforts to withhold assessment results would be counterproductive to the essential purpose of the process. Thus, the continuous implementation of assessment results further reduces the study design rigor.

- ✓ Most counseling and placement settings will have little tolerance for situations contrived to serve assessment. In general, the study design will need to reflect operations as they occur, not as they are implemented for assessment purposes.

✓ The focus of data gathering in the counseling and placement process must be on information that will be of direct benefit to these services. This probably will mean that the data available may not be the most optimum for assessment purposes.

IDENTIFY DATA REQUIREMENTS

Data requirements are derived from examination of the assessment objectives. Major classes of data indicated by the assessment objectives presented in Figure 11 include:

✓ Numbers and types of placements made.

✓ Client data.

✓ Client services data.

✓ Employer services data.

✓ Client training data.

Almost all counseling and placement services routinely collect extensive data about clients and placements. Thus, the key data related to occupational status change and expansion of job opportunities are likely to be available. What may be more difficult to obtain, or at least more difficult to classify, are data about client training and services after placements, and data about the types of services and interactions the counselors and placement officers undertake with employers in promoting an expanded range of job opportunities.

ESTABLISH CRITERIA

Criteria define the bases on which the assessment results are to be judged. Each assessment objective should have some preestablished criterion for judging whether or not that particular aspect of the counseling and placement process has been achieved. In effect, the criteria define the type and level of expected performance. In the examples stated in Figure 11, the criterion implied is that performance will improve significantly over that previously achieved in placement of clients with limited cognitive skills.

There are two pervasive aspects of assessment criteria which must be addressed to assure confidence in the achieved results. These are the reliability and validity of the data.

ASSURE RELIABILITY OF THE ASSESSMENT DATA

The reliability of a measure is the extent to which it can provide consistent results across repeated measurements. Three aspects of reliability are of concern:

- ✓ Sample size. A large enough number of cases should be included in a study group to yield relatively stable results. As group size is increased, greater reliability is achieved. There is, of course, some point at which the cost of increasing the sample size far outweighs the benefits gained in increased reliability. If major groups are to be broken into subgroups, subgroup size becomes of importance also.

- ✓ Measuring instruments. Measuring instruments should be designed so that identical phenomena are recorded in identical ways. This relates to the definitions which are provided for different classes of information. In situations where different persons are making comparable judgments, the rules for choosing among classes of information should be well specified.

- ✓ Long-term rather than momentary phenomena. The assessment should be concerned with counseling and placement results over some period of time to: (a) assure measurement of stable underlying conditions, and (b) overcome demonstration of effects due to extraneous and unrecorded phenomena.

ASSURE VALIDITY OF THE ASSESSMENT DATA

The validity of a measure refers to the extent to which a measure actually measures what it is intended to measure. There can be high reliability for measures of low validity. That is, repeated measures can achieve consistent results even when the measures fail to properly address the objectives for which they are intended. Two types of validity are of concern:

- ✓ External validity is concerned with the relationship of the measure to some outside criterion; it affects the soundness with which results can be generalized from the sample studied to some broader population.

- ✓ Internal validity is concerned with drawing correct conclusions about clients and events which are represented by the assessment data. Internal validity is a prerequisite to external validity.

Validity is a concern across the full range of assessment activities. Conditions which can sequentially contribute to invalidity include:

- ✓ Incorrect theoretical assumptions or invalid program objectives.

- ✓ Data gathering instruments which permit respondents to manipulate the data to a favorable data set, rather than to the provision of a truly objective data set.
- ✓ Use of a nonrandom sample, or a sample which systematically deselects types of respondents--initially, or over time.
- ✓ Observer bias or influence of the data in a consistent direction.
- ✓ Respondent bias, misinformation, misunderstanding, or modes of expression which introduce bias.
- ✓ Lack of control in administration of the data collection procedures.
- ✓ Bias in the selection and application of the analysis procedures.
- ✓ Extension of obtained results to nonsimilar situations.

OBTAIN AND PROCESS DATA

ATTEND TO FACTORS WHICH PROMOTE GOOD DATA COLLECTION

Since specific data requirements must be established on the basis of the objectives and criteria set for the assessment, no exact rules for what data or how much data can be provided in a general discussion of assessment activities. Guidelines to assist with the determination of data requirements and the acquisition of reliable and valid data include:

- ✓ Make sure the data are appropriate and adequate to address the assessment objectives and criteria.
- ✓ Do not collect data for which no use is intended.
- ✓ Review data for accuracy and to eliminate logical inconsistencies.
- ✓ Provide procedures, instructions, and training if necessary, for those who will act as data collectors or recorders so that data are complete, accurate, and consistent.
- ✓ Perform at least a sample verification of the data to assure accuracy and reliability.

PROCESS AND ANALYZE DATA

There are many ways in which assessment data can be processed and analyzed, ranging from simple counts of frequency of events, to application of sophisticated statistical treatments. Decisions about the type of data processing to be implemented are part of the assessment plan and cannot be made in the abstract. The following guidelines should assist in the planning for and actual processing of data:

- ✓ Make early plans for data processing and analysis. Even the simplest assessment schemes become difficult and cumbersome when the collected data and the data analysis do not satisfy the assessment intent. More elaborate schemes are doomed to failure, or at least severe recovery costs, if data processing and analysis are ignored in early planning stages.

- ✓ Keep in mind that results are to support operations. Gaining a few specific and certain bits of information is a better route than gaining a great number of questionable results.

- ✓ Use analytic procedures to enhance assessment results. Most collected data will support some form of statistical treatment. Application of even simple statistical techniques can help in drawing valid conclusions.

- ✓ Follow up on initial analyses. Where initial analyses provide positive information about the effects of the counseling and placement services, there is likely to be more detailed guidance gained through expansion of these data types or through further analysis of the collected data.

DERIVE CONCLUSIONS

MAKE OBJECTIVE INTERPRETATIONS OF THE ASSESSMENT RESULTS

The results of assessment should provide objective and useful information about the effects of the counseling and placement services. If results of the assessment are interpreted in light of other available information, they can be extremely valuable in improvement of these services. Review of background information assembled in the planning stage of the assessment will help characterize the results. Review of the results can contribute to such decisions as: selection of optimum strategies for counseling and placement of limited skills clients, identification of realistic placement opportunities within the community, and identification of what client services best support the limited skills client in obtaining and retaining a job.

USE RESULTS OF ASSESSMENT TO IMPROVE THE COUNSELING AND PLACEMENT SERVICES

Results of assessment are useful in identifying ways in which the counseling and placement services have been helpful in expanding the range of jobs available to the client group. But, they are also useful in identifying areas where some type of improvement or additional effort is warranted to effect the desired changes. Results of specific assessments may demonstrate that the placement services have not expanded the range of jobs available. If the planning for and handling of the assessment data and background information have been thorough, there should be valuable information available on which to alter the counseling and placement services to attain a greater impact on making jobs available to the population of persons with limited cognitive skills.